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Alonso, James Groups of square-free order, an algorithm. (**58** #22295)

(Belaga, È. G.) *See* **Computations in algebra and number theory,** (**56** #15248)

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Cato, Craig Addendum to: "The orders of the known simple groups as far as one

trillion" (Math. Comp. **31** (1977), no. 138, 574–577). (**57** #6178)
Faddeev, D. K.) *See* **Computations in algebra and number theory**, (**56** #15248)
Felsch, Volkmar Programs for permutation groups. (**49** #10765)
Fontet, Max Calcul de centralisateur d'un groupe de permutations. (**57** #16388)
Gerhards, Leonhard Group-theoretical investigations on computers. II. (**58** #22251b) Grouptheoretical investigations on computers. (**58** #22251a)
(Hall, Marshall, Jr.) *See* **Computers in algebra and number theory**, (**48** #5756)
Leech, John Computer proof of relations in groups. (**57** #12705)
Macdonald, I. D. A computer application to finite p-groups. (**51** #13028)
McKay, John The largest degrees of irreducible characters of the symmetric group. (**53** #8216)
Perrot, Jean-François Calcul dans un monoïde fini de transformations. (**57** #16445)
Shanks, Daniel Corrigenda: "Gauss's ternary form reduction and the 2-Sylow subgroup" (Math. Comp. **25** (1971), 837–853). (**58** #10735)
(Venkov, B. B.) *See* **Computations in algebra and number theory**, (**56** #15248)
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    International Conference on the Theory of Groups ★Proceedings of the Second International Conference on the Theory of Groups. **49** #9054
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(Dubreil, Paul) *See* **Séminaire: P. Dubreil**, (**52** #5252)
(Eršov, Ju. L.) *See* **Selected questions of algebra and logic**, (**48** #16)
(Gel′fand, S. I.) *See* **Seminar: Algebraic Groups**, (**48** #11106)
(Hilton, Peter John) *See* **Localization in group theory and homotopy theory, and related topics**, (**50** #3210)
(Kargapolov, M. I.) *See* **Selected questions of algebra and logic**, (**48** #16)
(Kirillov, A. A.) *See* **Seminar: Algebraic Groups**, (**48** #11106)
(Mal′cev, A. I.) *See* **Selected questions of algebra and logic**, (**48** #16)
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Algebra *See* **Selected questions of algebra and logic**, (**48** #16) *and* **Séminaire: P. Dubreil**, (**52** #5252)
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Continuous functions *See* **Symposia Mathematica**, (**53** #5225)

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Localization in group theory and homotopy theory, and related topics ★Localization in group theory and homotopy theory, and related topics. (**50** #3210)
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Symposium on Semigroups ★Proceedings of the First Symposium on Semigroups. (57 #9873)
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Séminaire:
P. Dubreil ★Séminaire P. Dubreil. 25e année: 1971/72. Algèbre, Fasc. 1: Exposés 1 à 15. (**52** #5252)
Seminar:
Algebraic Groups ★Семинар по алгебраическим группам. (Russian) [Seminar on algebraic groups] (**48** #11106)
Symposia Mathematica ★Symposia Mathematica. Vol. XVII. (**53** #5225)
Symposium:
Localization Theory *See* **Localization in group theory and homotopy theory, and related topics,** (**50** #3210)
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20Axx Foundations

20A05 Axiomatics and elementary properties

Dacić, R. (*with* Milić, Svetozar) On multihomomorphisms. **47** #1921
Feigelstock, Shalom Mersenne primes and group theory. **54** #381
Gaschütz, Wolfgang Subgroup criteria for an abelian group. **56** #8665
Giri, R. D. On the bases for laws of finite groups of small orders. **50** #7301
Korec, Ivan On a generalization of Mycielski's and Znám's conjectures about coset decomposition of Abelian groups. **50** #10025
Lenzi, Antonio *See* **Lenzi, Domenico, 52** #5770
Lenzi, Domenico (*with* Lenzi, Antonio) Sugli assiomi gruppali. (English summary) **52** #5770
Luh, Jiang (*with* Wang, Johnson C. K.) A note concerning group postulates. **48** #4080
Milić, Svetozar *See* **Dacić, R., 47** #1921
Nathanson, Melvyn B. Partial products in finite groups. **53** #8204
Schröter, Karl Zur axiomatischen Festlegung des Gruppenbegriffs. **51** #5717
Solecki, Andrzej On group operations in groups of exponent k. **51** #659
van der Walt, Andries P. J. Generalized homomorphisms. (Afrikaans. English summary) **48** #11263
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Secondary classifications:

Alas, O. T. Cardinality of a set of rings. (Portuguese) (**46** #3543)
Deutsch, Michael Zur Axiomatisierung zyklischer Gruppen. (**56** #5261)
Gonshor, Harry The category of recursive functions. (**46** #3281)
Gurevič, B. M. One- and two-sided regularity of stationary random processes. (Russian) (**48** #1299)
Rotkovič, G. Ja. Semiordered groups. (Russian) (**55** #10348)
Świerczkowski, S. Small local groups. (**53** #2797)

20A10 Metamathematical considerations [For word problems, see 20F10.]

Božović, Nataša B. On Markov properties of finitely presented groups. **57** #422
Miller, Charles F., III ★On group-theoretic decision problems and their classification. **46** #9147
Neumann, B. H. The isomorphism problem for algebraically closed groups. **54** #2767
Phillips, Richard E. (*with* Plotkin, J. M.) On factor coverings of groups. **52** #8227 (EA 53)
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$\aleph_0$-categoricity is not inherited by factor groups. **53** #3069
Sabbagh, Gabriel Sur les groupes que ne sont pas réunion d'une suite croissante de sous-groupes propres. (English summary) **51** #3270
Sacerdote, George S. Some undecidable problems in group theory. **47** #8660

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Baldwin, John T. (*with* Saxl, Jan) Logical stability in group theory. (**53** #10934)
Baudisch, Andreas Theorien abelscher Gruppen mit einem einstelligen Prädikat. (**54** #10001)
Entscheidbarkeitsprobleme elementarer Theorien von Klassen abelscher Gruppen mit Untergruppen. (English and Russian summaries) (**53** #7752)
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Belegradek, O. V. Definability in algebraically closed groups. (Russian) (**50** #12710)
Elementary properties of algebraically closed groups. (Russian. English summar (57 #9530)
Berthier, D. Stability of non-model-complete theories; products, groups. (**52** #2870)
Clare, Fred Operations on elementary classes of groups. (**52** #5413)
Doraczyńska, Elżbieta A complete theory of the midpoint operation. (Russian summar (**51** #5281)
Durnev, V. G. Positive formulae on groups. (Russian) (**57** #16053)
Eklof, Paul C. (*with* Fisher, Edward R.) The elementary theory of abelian group (**58** #27457)
Applications of logic to the problem of splitting abelian groups. (**58** #27458)
Eršov, Ju. L. Theories of nonabelian varieties of groups. (**51** #5280)
Felgner, Ulrich Einige gruppentheoretische Äquivalente zum Auswahlaxiom. (**54** #10017)
Fisher, Edward R. *See* **Eklof, Paul C.,** (**58** #27457)
Fridman, È. I. Undecidability of the elementary theory of abelian torsion-free group with a finite set of serving subgroups. (Russian) (**57** #2901)
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See also **Slobodskoĭ, A. M.,** (**55** #12512) *and* **Slobodskoĭ, A. M.,** (**57** #9515)
Grant, John Automorphisms definable by formulas. (**47** #3164 (E **51** #5287))
Güting, Rainer Subtractive abelian groups. (**51** #10070)
Hickman, John L. The construction of groups in models of set theory that fail the axior of choice. (**53** #12940)
Huber, Martin Sur le problème de Whitehead concernant les groupes abéliens libres (English summary) (**55** #98)
Kalman, John A. Substitution-and-detachment systems related to abelian groups. (**55** #5435)
Axiomatizations of logics with values in groups. (**55** #2484)
Kozlov, G. T. Undecidability of the theory of abelian groups with a chain of subgroups (Russian) (**57** #2902)
Livčak, Ja. B. Definable sets of integers. (Russian) (**58** #10418)
Malcolm, Wilfred G. Some results and algebraic applications in the theory of higher-order ultraproducts. (**49** #2362)
Mart′janov, V. I. Decidability of the theories of some classes of abelian groups with a automorphism predicate and a group predicate. (Russian) (**57** #9514)
The theory of abelian groups with predicates that distinguish subgroups and wit endomorphism operations. (Russian) (**55** #12513)
Undecidability of the theory of abelian groups with an automorphism. (Russian (**58** #21561)
Nebres, Bienvenido F. Elementary invariants for abelian groups (uses of saturated mode theory in algebra). (**54** #2455)
Paillet, Jean-Luc Résultats relatifs à l'existence de structures *n*-élémentaires. (Englis summary) (**55** #95)
Pavlov, Radoslav D. The impossibility of certain algorithms for the recognition of grou properties in minimal alphabets. (Russian. English summary) (**58** #16241)
Romanovs′kiĭ, V. Ju. Undecidable properties of unary recursive schemes over a fre group. (Russian. English summary) (**58** #5156)
Romov, B. A. Definability by formulas for predicates on a finite model. (Russian English summary insert) (**45** #3189)
Sabbagh, Gabriel Catégoricité et stabilité: quelques exemples parmi les groupes e anneaux. (English summary) (**51** #7849)
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Slobodskoĭ, A. M. (*with* Fridman, È. I.) Theories of abelian groups with predicates tha distinguish subgroups. (Russian) (**55** #12512)
(*with* Fridman, È. I.) Undecidable universal theories of lattices of subgroups o abelian groups. (Russian) (**57** #9515)
Sobociński, Bolesław Concerning the postulate-systems of subtractive abelian groups (**51** #10071)
Stoller, Gerald S. Three problems of S. M. Ulam with solutions and generalizations (**55** #7778)
Vasil′ev, V. G. Solvable elementarily equivalent groups. (Russian) (**58** #27460)
Važenin, Ju. M. The elementary theories of symmetric groups and semigroups. (Russian (**50** #4271)

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Costovici, Gh. Groups obtained from groups with groups of operators. (Romania summary) **56** #12101
Werner, Heinrich Finite simple nonabelian groups are functionally complete. **51** #327

Secondary classifications:

Martynov, L. M. Attainable classes of groups and semigroups. (Russian) (**51** #13111)

20Bxx Finite permutation groups

Cameron, Peter J. Suborbits in transitive permutation groups. **51** #5718
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(Danilov, Ju. A.) *See* **Weyl, Hermann,** (**51** #2830)
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Bannaï, Eiichi Maximal subgroups of low rank of finite symmetric and alternating groups. **50** #10027

Correction to: "Several remarks on transitive extensions of finite permutation groups". **47** #3493

Primitive extensions of rank 3 of the finite projective special linear groups PSL (n, q), $q=2^f$. **48** #4081

(*with* Iwasaki, Shiro) A note on the subdegrees of finite permutation groups. **48** #8607

Bartlow, T. L. An historical note on the parity of permutations. **46** #9148

Beck, István Cycle decomposition by transpositions. **56** #453

Bertram, Edward A. Even permutations as a product of two conjugate cycles. **45** #6905

Best, M. R. The distribution of some variables on symmetric groups. **45** #2003

Bickel, Thomas F. Circles in (B, N)-groups. **48** #384

Birch, B. J. (*with* Burns, Robert G.; Oates-Williams, Sheila; Neumann, Peter M.) On the orbit-sizes of permutation groups containing elements separating finite subsets. **53** #5708

Boccara, G. Sur certaines relations d'ordre dans les groupes symétriques finis ou infinis. **50** #10028

Buekenhout, Francis Some primitive groups normalizing a PSL$_2(q)$. **48** #2227

Transitive groups in which involutions fix one or three points. **47** #8661

Bürker, Michael (*with* Knapp, Wolfgang) Zur Vermutung von Sims über primitive Permutationsgruppen. **52** #5771

Burn, R. P. (*with* Maduram, D. M.) The Frobenius groups of Sitaram. **48** #4082

Burns, Robert G. *See* **Birch, B. J.; et al.**, **53** #5708

Cameron, Peter J. On a theorem of Livingstone and Wagner. **50** #4712

Camina, Alan R. (*with* Gagen, Terence M.) Some doubly transitive groups of odd degree. **48** #6220

Dixon, John D. Sylow subgroups of primitive permutation groups. **50** #13209

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20B15 Uniprimitive groups

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Dempwolff, Ulrich On primitive permutation groups whose stabilizer of a point induces $L_2(q)$ on a suborbit. **54** #2771 (EA **54**) (E **55** #3046)

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Jones, Gareth A. Regular subgroups of uniprimitive permutation groups of degree p^3, where p is prime. **52** #541

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Hale, Mark P., Jr. (*with* Shult, Ernest E.) Equiangular lines, the graph extension theorem, and transfer in triply transitive groups. **49** #5144
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Kerby, William (*with* Wefelscheid, Heinrich) Ein Unterscheidungsmerkmal bei endlichen scharf 3-fach transitiven Gruppen. **49** #9059
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Praeger, Cheryl E. Doubly transitive permutation groups which are not doubly primitive. (**55** #3045)

Quattrocchi, Pasquale Sugli insiemi di sostituzioni strettamente 3-transitivi finiti. (**56** #9451)

Samuel, Isaac Étude graphique de la table d'un groupe fini. (**58** #27658)

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André, Johannes Über geometrische Strukturen, die zu Permutationsgruppen gehören. **53** #3077

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Bird, Elliott H. Automorphism groups of partial orders. **47** #6820

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Cofman, Judita On automorphism groups of finite geometries. **49** #7342

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Correale, Gennaro Il gruppo tetraedrico. (Not reviewed)

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Coufal, Oldřich Contributions to the theory of decompositions on a group. **45** #8714

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Davitt, Richard M. (*with* Otto, Albert D.) On the automorphism group of a finite modular p-group. **47** #3495

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Hoffman, Frederick Orbits under actions of affine groups over $GF(2)$. **53** #3078

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Nagrebeckiĭ, V. T. The groups with a finite number of automorphisms. (Russia **45** #2007

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Plotkin, B. I. ★Groups of automorphisms of algebraic systems. **49** #9061

Rabinovič, E. B. (*with* Feĭnberg, V. Z.) Normal subgroups of a 2-transitive group c automorphisms of a totally ordered set. (Russian) **49** #394 (E **54** #2772)

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Romov, B. A. The uniprimitive foundations of the maximal subalgebras of Post algebras (Russian. English summary insert) **47** #8666

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Sarvanov, V. I. The matrices of cyclic permutations. (Russian) **57** #428

Schulz, Ralph-Hardo Zur Geometrie der PSU$(3, q^2)$. **57** #12659

Shaughnessy, Edward P. Codes with simple automorphism groups. **45** #6910

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Betsch, Gerhard (*with* Clay, James R.) Block designs from Frobenius groups and planar near-rings. (**53** #5326)

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Cameron, Peter J. Cohomological aspects of two-graphs. (**58** #21779)

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Foulser, David A. Baer p-elements in translation planes. (**49** #7908)

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Gardiner, Anthony Doubly primitive vertex stabilisers in graphs. (**54** #143)

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Arc transitivity in graphs. III. (**58** #16383)

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Kantor, William M. Generalized quadrangles having a prime parameter. (**53** #12996)

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  Collineation groups whose order is prime to the characteristic. (**58** #12708)

Peczynski, Norbert (*with* Rosenberger, Gerhard; Zieschang, H.) Über erzeugende ebener diskontinuierlicher Gruppen. (**55** #12823)

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Plaumann, Peter Automorphismengruppen diskreter Gruppen als topologische Gruppen. (**56** #12167)

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Schmidt, Douglas C. *See* **Druffel, Larry E.; et al.**, (**58** #21781)

Schrag, Gerald Every finite group is the automorphism group of some finite orthomodular lattice. (**53** #2784)

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Szalay, Michael (*with* Turán, Pál) On some problems of the statistical theory of partitions with application to characters of the symmetric group. I. (**58** #21991a)

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Wesołowski, Tadeusz Automorphisms of the idempotent reducts of certain groups with exponent 2. (Polish. English summary) (**57** #5878)

White, Dennis E. Classifying patterns by automorphism group: an operator theoretic approach. (**53** #5320)

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Cameron, Peter J. Bounding the rank of certain permutation groups. **45** #3541

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Chillag, David On transitive permutation groups with an imprimitivity block of prime length. **56** #8673

Davison, J. L. Some mappings associated with the permutation groups. **56** #8674

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Dussaud, René Algébrisation des ensembles finis. Application à l'étude du groupe symétrique. **57** #12660

Fantham, Peter Some remarks on weights of permutations. **47** #1638

Felsch, Volkmar Programs for permutation groups. **49** #10765

Klemm, Michael Über den Vertauschungsring von Permutationsgruppen. **55** #3048

Kowol, Gerhard Über eine n-dimensionale Permutationspolynomgruppe. (English summary) **52** #545

Kreweras, Germain Classification des permutations suivant certaines propriétés ordinales de leur représentation plane. **51** #3280

McKenzie, Ralph A note on subgroups of infinite symmetric groups. **45** #3545

Metel′skiĭ, N. N. (*with* Demidenko, V. M.) The quadratic selection problem. (Russian) **53** #8209

Nobusawa, Nobuo On symmetric structure of a finite set. **50** #7309

Primenko, È. A. The number of types of invertible Boolean functions. (Russian) **57** #9817

Sherman, Gary J. A probabilistic estimate of invariance for groups. **58** #861

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Gilpin, Michael Three identities between Stirling numbers and the stabilizing character sequence. (**54** #2479)

Glass, A. M. W. ★Ordered permutation groups. (**54** #10097)

Golunkov, Ju. V. Realization of microprogram bases on shift registers. (Russian. English summary insert) (**56** #8225)

Kopylev, E. S. Minimization of the scalar product of multidimensional matrices on a symmetric group. (Russian) (**53** #13273)

McCleary, Stephen H. Closed subgroups of lattice-ordered permutation groups. (**47** #97)

Ostrom, Theodore G. Elations in finite translation planes of characteristic 3. (**50** #1109)

Pavlov, A. I. The equation $x^k = a$ in a symmetric group. (Russian) (**58** #10794)

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Viennot, Gérard Quelques algorithmes de permutations. (See RŽMat **1977** #7 V473)

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Çelik, Özdem Character tables of finite groups. **51** #10446

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Hill, Victor E. ★Groups, representations, and characters. **54** #7596

Keown, R. ★An introduction to group representation theory. **52** #8230

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Golovina, L. I. ★Линейная алгебра и некоторые ее приложения. (Russian) [Linear algebra and some of its applications] (**54** #2675)

20C05 Group rings and their modules [See also 16A26.]

Ahmad, Mohamed Kheir Sur l'isomorphisme des anneaux de groupe. (English summary) **56** #15741

  Sur le groupe des unités de $\mathbf{Z}[G]$. (English summary) **58** #22261

Akasaki, Takeo Idempotent ideals in integral group rings. II. **48** #2233

Alperin, J. L. Projective modules and tensor products. **53** #5712

  Periodicity in groups. **56** #8676

Bachmann, Franz (*with* Grünenfelder, Luzius) The periodicity by the graded ring associated with an integral group ring. **50** #10032

Backhouse, Nigel B. Tensor operators and twisted group algebras. **52** #546

Barannik, Ju. L. Representations of a group of type p^∞ over the ring of p-adic integers. (Russian. English summary) **58** #5869

  Sfields that arise in the decomposition of the rational group algebras of finite groups of order $p^\alpha q^\beta$. (Russian) (Not reviewed)

Bass, Hyman Ranks of projective ZG-modules. **52** #14020

Baumslag, Gilbert A remark on the multiplicative group of the division ring of a poly-infinite-cyclic group. **51** #3281

Bautista Ramos, Raymundo Note on isomorphisms of group rings. (Spanish) **47** #6822

Benard, Mark The Schur subgroup. I. **46** #1889

  (*with* Schacher, Murray M.) The Schur subgroup. II. **46** #1890

Benson, Clark T. (*with* Gay, David A.) On dimension functions of the generic algebra of type D_n. **56** #3101

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  Irreducible modules of solvable groups are algebraic. **53** #10897

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Kimura, Hiroshi On some doubly transitive groups of degree even such that a Sylow

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20D25 Special subgroups (Frattini, Fitting, etc.)

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Fukushima, Hiroshi Weakly closed cyclic 2-groups in finite groups. **58 #5917**
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Gallian, Joseph A. The Hughes conjecture and groups with absolutely regular subgroups or ECF-subgroups. **51 #696 (EA 51)**
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A normal complement to a Frobenius subgroup. (Russian) **57 #9840**
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Sesekin, N. F. (*with* Tokareva, V. A.) The Frattini subgroup of almost polycyc groups. (Russian) **48 #4118**
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Smith, Fredrick L. On groups with an involution z such that the generalized Fitti subgroup E of $C(z)$ is extra-special and $C(z)/E \supseteq (\mathrm{Out}(E))'$. **55 #10563**
Solomon, Ronald M. Maximal 2-components in finite groups. **54 #10404**
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ázquez Lapuente, Manuel ★Hipercentros de un grupo finito respecto de funciones formación o de formaciones Π-saturadas. (Spanish) [Hypercenters of a finite group with respect to formation functions or Π-saturated formations] **58** #16881
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eidleman, James C. (*with* Brewster, Benjamin) Strict normality in Fitting classes. I. (**58** #5901a)
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ertram, Edward A. On large cyclic subgroups of finite groups. (**53** #2870)
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rankl, Péter On commutator subgroups. (**58** #5944)
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Baudisch, Andreas Entscheidbarkeitsprobleme elementarer Theorien von Klassen abelscher Gruppen mit Untergruppen. (English and Russian summaries) (**53** #7752)
Eklof, Paul C. Categories of local functors. (**55** #7766)
Fridman, È. I. *See* **Slobodskoĭ, A. M.,** (**53** #10575)
Gardner, B. J. Radicals of abelian groups and associative rings. (**48** #2172)
Grišin, A. V. The multiplicative group of a field. (Russian) (**52** #13766)
Hunter, Roger H. (*with* Richman, Fred; Walker, Elbert A.) Simply presented valuated abelian *p*-groups. (**58** #22338)
Johnson, James S. Triples for classes which are not varieties. (**51** #7996)
Khan, Mohd. Zubair Modules behaving like torsion abelian groups. (**58** #22178)
Mollov, Todor Ž. Sylow *p*-subgroups of group algebras of countable abelian groups over a field of characteristic *p*. (Russian) (**56** #456)
Richman, Fred *See* **Hunter, Roger H.; et al.,** (**58** #22338)
Slobodskoĭ, A. M. (*with* Fridman, È. I.) The theory of the additive group of the integers with an arbitrary number of predicates that define maximal subgroups. (Russian) (**53** #10575)
Walker, Elbert A. *See* **Hunter, Roger H.; et al.,** (**58** #22338)

20K15 Torsion free groups, finite rank

Arnold, David M. A duality for quotient divisible abelian groups of finite rank. **47** #361
  Grothendieck and Whitehead groups of torsion free abelian groups. **48** #4149
  Strongly homogeneous torsion free abelian groups of finite rank. **53** #3151
  (*with* Vinsonhaler, Charles; Wickless, William J.) Quasi-pure projective and injective torsion free abelian groups of rank 2. **56** #3146
Bekker, I. H. The holomorphs of torsion-free abelian groups. (Russian) **50** #13314
Bican, Ladislav Splitting of pure subgroups. **54** #5367
  Factor-splitting abelian groups of finite rank. **54** #5368
  The splitting length of mixed abelian groups of rank one. **55** #5765
Brahana, T. R. On the isomorphism problem for finitely generated torsion free class 2 nilpotent groups. (Serbo-Croatian summary) **47** #8721
De Marco, Giuseppe On the algebraic compactness of some quotients of product groups. **56** #497
Feigelstock, Shalom The Nilstufe on the direct sum of rank 1 torsion free groups. **48** #2274 (E **51** #746)
  On the nilstufe of homogeneous groups. **49** #9099
  The nilstufe of rank two torsion free groups. **49** #9100
  A correction of: "The Nilstufe of the direct sum of rank 1 torsion free groups" (Acta Math. Acad. Sci. Hungar. **24** (1973), 269–272). **51** #746
Fomin, A. A. The tenser product of countable abelian torsion-free groups. (Russian) **56** #3147
Freedman, Haya On the additive group of a torsion-free ring of rank two. **48** #6276
Friedlander, Eric M. Extension functions for rank 2, torsion free abelian groups. **52** #598
Fuchs, László (*with* Loonstra, Frans) On direct decompositions of torsion-free abelian groups of finite rank. **45** #8723
  See also **May, Warren; et al., 57** #482
Gardner, B. J. Type sets and admissible multiplications. **50** #2365
  Rings on completely decomposable torsion-free abelian groups. **50** #13315
  (*with* Jackett, D. R.) Rings on certain classes of torsion-free abelian groups. **56** #15795
Grinšpon, S. Ja. Almost holomorphically isomorphic abelian groups. (Russian) **54**
Ito, Ryuichi On type sets of torsion-free abelian groups of rank 2. **50** #7377
Jackett, D. R. *See* **Gardner, B. J., 56** #15795
Jakovlev, A. V. On the classification problem of torsion-free abelian groups of rank. (Russian) **57** #481
Janakiraman, S. Skew projective abelian groups. **48** #440
Jung, Calvin F. K. (*with* Jung, Fuanglada Riddhagni) Torsion-free locally cyclic decomposable groups. **47** #6888
Jung, Fuanglada Riddhagni *See* **Jung, Calvin F. K., 47** #6888
Krylov, P. A. Torsion-free abelian groups with cyclic *p*-basic subgroups. (Rus **56** #498
Kušnir, M. I. Quotient divisible groups of finite rank. (Russian. English sumr **45** #8724
  Completely decomposable groups. (Russian) **50** #13316
Lady, E. L. Summands of finite rank torsion free abelian groups. **50** #506
  Almost completely decomposable torsion free abelian groups. **50** #2366
  Nearly isomorphic torsion free abelian groups. **51** #5801
van Leeuwen, Leo C. A. Some problems and results in abelian group theory. **50** #
Loonstra, Frans *See* **Fuchs, László, 45** #8723
May, Warren (*with* Toubassi, Elias) A result on problem 87 of L. Fuchs. **57** #482
Meijer, A. R. (*with* Viljoen, G.) A note on the extensions of the infinite cyclic grou realizable groups. **49** #7375
Metelli, Claudia (*with* Salce, Luigi) The endomorphism ring of an abelian torsio homogeneous separable group. **52** #5827
Murley, C. E. The classification of certain classes of torsion free Abelian gr **48** #441
  Direct products and sums of torsion-free Abelian groups. **47** #362
Mutzbauer, Otto Klassifizierung torsionsfreier abelscher Gruppen des Ranges 2. **57** #12721
Pufter, G. Antinil groups. **54** #12928
Reid, James D. On rings on groups. **50** #4780
Rotman, Joseph J. Sheaves and abelian groups. **51** #747
Salce, Luigi *See* **Metelli, Claudia, 52** #5827
Schultz, Phillip Torsion-free extensions of torsion-free abelian groups. **49** #7376
Sebel′din, A. M. Conditions of the isomorphism of completely decomposable torsion-free abelian groups with isomorphic rings of endomorphisms. (Russian) **45** #8728
  Groups of homomorphisms of completely decomposable torsion-free ab groups. (Russian) **48** #6277
  Complete direct sums of torsion-free abelian groups of rank 1 with isomor groups or rings of endomorphisms. I. (Russian) **49** #5206
Stratton, A. E. A splitting theorem for mixed abelian groups. **51** #5802
  (*with* Webb, M. C.) The nilpotency of torsion-free rings with given type **57** #483
Strecker, Reinhard Induktive Isomorphie unendlicher abelscher Gruppen. **46** #268
Toubassi, Elias *See* **May, Warren, 57** #482
Viljoen, G. *See* **Meijer, A. R., 49** #7375
Vinsonhaler, Charles (*with* Wickless, William J.) Torsion free abelian groups quasi-projective over their endomorphism rings. **58** #927a
  Torsion free abelian groups quasi-projective over their endomorphism rings **58** #927b
  See also **Wickless, William J., 47** #1973 *and* **Arnold, David M.; et al., 56** #3146
Warfield, Robert B., Jr. Extensions of torsion-free Abelian groups of fiinite r **46** #5480
Webb, M. C. A bound for the nilstufe of a group. **56** #15796
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Wickless, William J. Abelian groups which admit only nilpotent multiplications. **46** #3641
  (*with* Vinsonhaler, Charles) A note on torsion-free abelian groups of finite r **47** #1973
  See also **Arnold, David M.; et al., 56** #3146 *and* **Vinsonhaler, Charles, 58** #927a

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  Genera and direct sum decompositions of torsion free modules. (**57** #6102)
Doraczyńska, Elżbieta A complete theory of the midpoint operation. (Russian summ (**51** #5281)
Fridman, È. I. Undecidability of the elementary theory of abelian torsion-free gr with a finite set of serving subgroups. (Russian) (**57** #2901)
Hill, Paul Some almost simple rings. (**47** #5055)
Lady, E. L. On classifying torsion free modules over discrete valuation rings. (**58** #16634)
Livčak, Ja. B. A resolving procedure for the elementary theory of a torsion-free Ab group with a distinguished subgroup. (Russian) (**48** #1906)

20K20 Torsion free groups, infinite rank

Bekker, I. H. Groups of crossed homomorphisms of the automorphism group torsion-free abelian groups. (Russian) **48** #6278
Beljakova, N. P. Isomorphisms of the lattices of α-admissible subgroups of torsion abelian groups. (Russian) **49** #2981
Benabdallah, Khalid (*with* Bradley, Robert) Sur les groupes quasi-purs-projectifs torsion. **55** #12831
Bican, Ladislav Completely decomposable abelian groups any pure subgroup of whi completely decomposable. **50** #507
  Completely decomposable abelian groups any regular subgroup of whic completely decomposable. **53** #3152

dley, Robert *See* **Benabdallah, Khalid, 55** #12831
re, Fred On elementary equivalence of abelian groups. **53** #649 (EA **53**)
nin, A. A. Tensor product of torsion-free abelian groups. (Russian) **52** #14084
hs, László Some aspects of the theory of torsion-free abelian groups. **50** #10115
  Note on direct decompositions of torsion-free abelian groups. **46** #269
  Note on extensions of abelian groups by primary groups. **47** #6891
  (*with* Viljoen, G.) Quasi-direct decompositions of torsion-free abelian groups of infinite rank. **50** #10116
  Indecomposable abelian groups of measurable cardinalities. **52** #5828
  (*with* Gräbe, P. J.) Number of indecomposable summands in direct decompositions of torsion-free abelian groups. **54** #10441
ibe, P. J. *See* **Fuchs, László, 54** #10441
ffith, Phillip A. $\aleph_n$-free abelian groups. **48** #4150
les, Alfred W. Analogues of the stacked bases theorem. **58** #22334
uptfleisch, G. J. Torsion free abelian groups with isomorphic endormorphism rings. **48** #442
l, Paul New criteria for freeness in abelian groups. **48** #4151
  New criteria for freeness in abelian groups. II. **50** #4781
  Criteria for freeness in groups and valuated vector spaces. **58** #5978
ler, Howard Lyn (*with* Huber, Martin; Shelah, Saharon) The structure of Ext(A, Z) and $V=L$. **58** #11171
ber, Martin *See* **Hiller, Howard Lyn; et al., 58** #11171
ng, Calvin F. K. (*with* Jung, Fuanglada Riddhagni) Locally cyclic decomposable abelian groups. **47** #6889
  (*with* Jung, Fuanglada Riddhagni) Maximal locally cyclic subgroups of abelian groups. **47** #6890
ng, Fuanglada Riddhagni *See* **Jung, Calvin F. K., 47** #6889 *and* **Jung, Calvin F. K., 47** #6890
malov, F. F. Fuchs5 groups with cardinality $\aleph_1$. (Russian) **53** #10951
Leeuwen, Leo C. A. On *p*-pure subgroups of torsion-free cotorsion groups. **48** #6279
onstra, Frans Remark on the maximal torsion subgroup of an abelian group. **53** #650
der, Adolf Finite order extensions of a primary group by a torsion-free group. **55** #8211
tsuda, Ryûki Problem 36 of L. Fuchs' *Abelian groups*. (Japanese) **58** #28221
eijer, A. R. A note on separable homogeneous extensions of the Specker group. **48** #6280
Neill, John D. An uncountable Noetherian ring with free additive group. **56** #8720
satti, Adalberto Anelli di endomorfismi di gruppi abeliani senza torsione. **49** #2982
elah, Saharon *See* **Hiller, Howard Lyn; et al., 58** #11171
anton, Robert O. Infinite decomposition bases. **58** #22335
sil′ev, Ju. P. An abstract characteristic for torsion-free abelian groups. (Russian) **57** #6227
joen, G. *See* **Fuchs, László, 50** #10116
asonhaler, Charles (*with* Wickless, William J.) Completely decomposable groups which admit only nilpotent multiplications. **50** #7379
alker, Carol L. Local quasi-isomorphisms of torsion free abelian groups. **51** #748
ebb, Cary Transformations on tensor products and the torsionless property in abelian groups. **54** #427 (E **55** #10580)
  Corrigendum: "Transformations on tensor products and the torsionless property in abelian groups" (Bull. Austral. Math. Soc. **14** (1976), 389–396). **55** #10580
ickless, William J. *See* **Vinsonhaler, Charles, 50** #7379

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  Infinitary model theory of abelian groups. (**56** #11778)
  (*with* Mekler, Alan H.) On constructing indecomposable groups in *L*. (**56** #15412)
le, David (*with* Klee, Victor) Unique reducibility of subsets of commutative topological groups and semigroups. (**52** #8324)
bel, Rüdiger Kartesische Produkte von Gruppen. (**52** #5805)
ber, Martin Sur le problème de Whitehead concernant les groupes abéliens libres. (English summary) (**55** #98)
  Sur les groupes abéliens de la forme Ext(A, G). (English summary) (**56** #5288)
ee, Victor *See* **Gale, David,** (**52** #8324)
ekler, Alan H. *See* **Eklof, Paul C.,** (**56** #15412)
lce, Luigi Sull'anello degli endomorfismi dei gruppi abeliani, ridotti e liberi da torsione. (**46** #9100)
elah, Saharon A compactness theorem for singular cardinals, free algebras, Whitehead problem and transversals. (**52** #10410)
sil′ev, È. S. The elementary theories of complete torsion-free abelian groups with *p*-adic topology. (Russian) (**49** #2329)

20K25 Direct sums, direct products, etc.

nold, David M. A class of pure subgroups of completely decomposable abelian groups. **48** #4152
  (*with* Murley, C. E.) Abelian groups, *A*, such that *Hom*$(A,—)$ preserves direct sums of copies of *A*. **51** #13076
ng, Chang M. Partially well-ordered sets of infinite matrices and closed classes of abelian groups. **50** #4782
čvář, Jindřich (*with* Jambor, Pavel) On general concept of basic subgroups. II. **48** #4153
enabdallah, Khalid (*with* Irwin, John M.) Pure *N*-high subgroups, *p*-adic topology and direct sums of cyclic groups. **48** #11354
  (*with* Irwin, John M.) An application of *B*-high subgroups of abelian *p*-groups. **51** #749
rnelius, E. F., Jr. A generalization of separable groups. **51** #13077
klof, Paul C. The structure of ultraproducts of abelian groups. **48** #6281
Feigelstock, Shalom On the nilstufe of the direct sum of two groups. **45** #2014
Fuchs, László (*with* Irwin, John M.) On $p^{\omega+1}$-projective *p*-groups. **51** #10488
  (*with* Salce, Luigi) Gruppi monotoni di successioni intere. **57** #12722
Göbel, Rüdiger The characteristic subgroups of the Baer-Specker group. **51** #750
Hamaker, William (*with* Stein, Sherman K.) Splitting groups by integers. **50** #2367
Herzog, Marcel (*with* Schönheim, J.) Group partition, factorization and the vector covering problem. **46** #1927
Hill, Paul Pure-complete subgroups of direct sums of Prüfer groups. **46** #3642
  Primary groups whose subgroups of smaller cardinality are direct sums of cyclic groups. **47** #3567
  On the splitting of modules and abelian groups. **49** #2983
Hsü, Chin Shui Problem 26 of L. Fuchs. **49** #440
Hunter, Roger H. (*with* Richman, Fred; Walker, Elbert A.) Finite direct sums of cyclic valuated *p*-groups. **55** #8212
  (*with* Richman, Fred; Walker, Elbert A.) Existence theorems for Warfield groups. **57** #12723
Irwin, John M. *See* **Benabdallah, Khalid, 48** #11354; **Benabdallah, Khalid, 51** #749 *and* **Fuchs, László, 51** #10488
Ivanov, A. V. A problem on abelian groups. (Russian) **58** #16911
Jambor, Pavel *See* **Bečvář, Jindřich, 48** #4153
Kalužnin, L. A. (*with* Suščans′kiĭ, V. Ī.) Wreath products of abelian groups. (Russian) **53** #13437 (EA **54**)
Kamalov, F. F. *Q*-groups and Fuchs 5 groups. (Russian) **51** #5803
  Intersections of direct summands of abelian groups. (Russian) **58** #16912
Koyama, Toshiko On a characterization of quasi-complete *p*-groups. **56** #3148
Lady, E. L. Countable torsion products of abelian *p*-groups. **47** #1974
Lawver, Donald Allen *See* **Toubassi, Elias, 48** #8654
Megibben, Charles (*with* Toubassi, Elias) Tensor products of mixed abelian groups. **54** #5369
Mekler, Alan H. The number of *K*-free abelian groups and the size of Ext. **57** #484
Murley, C. E. *See* **Arnold, David M., 51** #13076
Myškin, V. I. Meromorphic subdirect decompositions of mixed Abelian groups. (Russian) **45** #3563
Poole, George D. (*with* Reid, James D.) Abelian groups quasi-injective over their endomorphism rings. **46** #9194
Procházka, Ladislav A consequence of a theorem of L. Fuchs. **46** #5481
Reid, James D. *See* **Poole, George D., 46** #9194
Richman, Fred *See* **Hunter, Roger H.; et al., 55** #8212 *and* **Hunter, Roger H.; et al., 57** #12723
Salce, Luigi *See* **Fuchs, László, 57** #12722
Sands, A. D. On a conjecture of G. Hajós. **51** #13078
Schönheim, J. *See* **Herzog, Marcel, 46** #1927
Stein, Sherman K. *See* **Hamaker, William, 50** #2367
Suščans′kiĭ, V. Ī. *See* **Kalužnin, L. A., 53** #13437 (EA **54**)
Toubassi, Elias (*with* Lawver, Donald Allen) Height-slope and splitting length of abelian groups. **48** #8654
  See also **Megibben, Charles, 54** #5369
Walker, Carol L. Local-quasi-endomorphism rings of rank one mixed abelian groups. **57** #6228
Walker, Elbert A. The groups ${}_{\beta}$. **51** #751
  See also **Hunter, Roger H.; et al., 55** #8212 *and* **Hunter, Roger H.; et al., 57** #12723
Wiegold, James Direct limits of abelian groups. **52** #600
Zaĭcev, D. Ī. The existence of direct complements in groups with operators. (Russian) **57** #16430

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Deveney, James Kevin Pure subfields of purely inseparable field extensions. (**54** #7442)
Eklof, Paul C. Whitehead's problem is undecidable. (**57** #16071)
Fritzsche, Reiner Verallgemeinerung eines Satzes von Prüfer und Baer. (**46** #108)
  Verallgemeinerung eines Satzes von Kulikov. (**52** #13539)
Head, Tom Groups of sequences and direct products of countable groups. (**47** #345)
Kowalski, Eugeniusz Semidirect product of two finite cyclic groups. (Polish. English summary) (**47** #3525)

20K30 Automorphisms, homomorphisms, endomorphisms

Arnold, David M. (*with* Lady, E. L.) Endomorphism rings and direct sums of torsion free abelian groups. **54** #5370
Beljakova, N. P. Definability of free abelian groups of finite rank by the lattice of subgroups that are invariant with respect to an involutory automorphism. (Russian) **45** #374
Benabdallah, Khalid (*with* Laroche, Adèle) Quasi-*p*-pure-injective groups. **58** #11172
Bezverhnjaja, I. S. On the automorphism of subgroups of a free abelian group. (Russian) **58** #28222
Byrd, Richard D. (*with* Lloyd, Justin T.; Pedersen, Franklin D.; Stepp, James W.) Automorphims of semigroups of complexes of abelian groups. **54** #12929
Castagna, F. Endomorphisms of countable direct sums of torsion complete groups. **48** #443
Cohen, Stephen D. (*with* Mullen, Gary L.) Automorphisms of functions in abelian permutation groups. **52** #14085
Corner, A. L. S. On endomorphism rings of primary abelian groups. II. **54** #10442
Douglas, A. J. (*with* Farahat, H. K.) The homological dimension of an abelian group as a module over its ring of endomorphisms. II. **47** #3568
d'Este, Gabriella Sui gruppi abeliani il cui anello degli endomorifsmi è numerabile e non discreto nella topologia finita. **56** #3149
Farahat, H. K. *See* **Douglas, A. J., 47** #3568
Firsov, Ju. M. The endormorphisms of the subgroups of a free abelian group. (Russian) **48** #8655
Gerstner, Otto Algebraische Kompaktheit bei Faktorgruppen von Gruppen ganzzahliger

Abbildungen. (English summary) **49** #441

Hartley, B. Groups of automorphisms of abelian $\aleph_1$-groups. **51** #13079

Hausen, Jutta On the normal structure of automorphism groups of Abelian *p*-groups. **48** #2275

Primary abelian groups and the normal structure of their automorphism groups. **51** #13080

The automorphism group of an abelian *p*-group and its normal *p*-subgroups. **48** #4154

The normal structure of the automorphism group of an abelian *p*-group. **50** #10117

The automorphism group of an abelian *p*-group and its noncentral normal subgroups. **50** #508

Structural relations between general linear groups and automorphism groups of abelian *p*-groups. **50** #509

Automorphism groups of abelian *p*-groups. **50** #13317

On automorphism groups and endomorphism rings of abelian *p*-groups. **51** #13081

(*with* Johnson, Johnny A.) Abelian groups with many automorphisms. **57** #6229

The Jacobson radical of some endomorphism rings. **57** #6230

(*with* Johnson, Johnny A.) Characterization of the primary abelian groups, bounded modulo the divisible subgroup, by the radical of their endomorphism rings. **57** #6231

How automorphism groups reveal Ulm invariants. **56** #499

Hulanicki, Andrzej Unipotent groups of automorphisms of abelian groups and free products of *p*-groups. **51** #752

Ibrahim, A. Shawky Existence theorem for abelian groups. (Arabic summary) **56** #8721

Johnson, Johnny A. *See* **Hausen, Jutta**, **57** #6229 *and* **Hausen, Jutta**, **57** #6231

Krylov, P. A. Extension of isomorphisms in abelian *p*-groups. (Russian) **48** #6282

Radicals of rings of endomorphisms of torsion-free Abelian groups. (Russian) **50** #10118

Sums of automorphisms of abelian groups, and the Jacobson radical of the endomorphism ring. (Russian) **57** #3283

Lady, E. L. *See* **Arnold, David M.**, **54** #5370

Larin, S. V. Abelian groups that admit a fixed point free automorphism of order q^n. (Russian) **56** #3150

Laroche, Adèle *See* **Benabdallah, Khalid**, **58** #11172

Lawver, Donald Allen On the commutativity and generalized regularity of $\mathcal{E}(G)$. **47** #363

Abelian groups in which endomorphic images are fully invariant. **50** #13318

van Leeuwen, Leo C. A. Remarks on endomorphism rings of torsion-free abelian groups. **46** #5482

On endomorphisms and quasi-endomorphisms of torsionfree groups. **56** #15797

Lemaire, Claude Morphismes partiels et semi-localisations. **46** #7408

Libih, A. L. Inverse semigroups of local automorphisms of abelian groups. (Russian) **48** #8656

Liebert, Wolfgang Ulm valuations and co-valuations on torsion-complete *p*-groups. **57** #485

Lloyd, Justin T. *See* **Byrd, Richard D.; et al.**, **54** #12929

Martineau, R. Patrick Elementary abelian fixed point free automorphism groups. **46** #5483

May, Warren (*with* Toubassi, Elias) Endomorphisms of abelian groups and the theorem of Baer and Kaplansky. **54** #10443

Megibben, Charles Stiff groups and wild socles. **45** #8725

Michel, Horst Nilpotente Endomorphismen von freien abelschen Gruppen. **47** #5143

Mišina, A. P. The automorphisms and endomorphisms of abelian groups. (Russian. English summary) **45** #8727

Monk, G. S. On the endomorphism ring of an abelian *p*-group, and of a large subgroup. **48** #2276

Mullen, Gary L. *See* **Cohen, Stephen D.**, **52** #14085

Pannone, Maria A. Semigruppi di endomorfismi di gruppi abeliani finiti. (English summary) **48** #6283

Parr, James T. Endomorphism rings of rank two torsion-free abelian groups. **47** #5144

Pedersen, Franklin D. *See* **Byrd, Richard D.; et al.**, **54** #12929

Poli, A. Un groupe d'automorphismes d'algèbre de groupe abélien. **51** #8289

Rangaswamy, K. M. Abelian groups with self-injective endomorphism rings. **52** #5829

van Rooyen, Gootlieb Wilhem Schröder ★Ideal subgroups of abelian groups. (Dutch summary) **48** #444

Schultz, Phillip On a paper of Szele and Szendrei on groups with commutative endomorphism rings. **47** #5145

The endomorphism ring of the additive group of a ring. **49** #2984

Sebel′din, A. M. Sums of automorphisms of completely decomposable torsion-free abelian groups. (Russian) **52** #5830

Spoletini Cherubini, Alessandra Gli FA-gruppi abeliani periodici. (English summary) **56** #500

Stepp, James W. *See* **Byrd, Richard D.; et al.**, **54** #12929

Toubassi, Elias *See* **May, Warren**, **54** #10443

Wickless, William J. Abelian groups in which every endomorphism is a left multiplication. **54** #428

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Alonso, James Extensions of automorphisms of cyclic subgroups. (**50** #2349)

Ger, Roman On some functional equations with a restricted domain. II. (**57** #17065)

Hausen, Jutta The Jacobson radical of endomorphism rings of totally projective groups of finite type. (**56** #8604)

(*with* Johnson, Johnny A.) Ideals and radicals of some endomorphism rings. (**58** #771)

Johnson, Johnny A. *See* **Hausen, Jutta**, (**58** #771)

Lavis, A. Prolongement simulatné d'une famille d'endomorphismes partiels ouverts dans les groupes topologiques commutatifs. (English summary) (**56** #5774)

Mart′janov, V. I. Undecidability of the theory of abelian groups with an automorp (Russian) (**58** #21561)

Rangaswamy, K. M. Endomorphism representations of Zorn rings and subclass rings with enough idempotents. (**56** #8608)

Reid, James D. Quasi-pure-injectivity and quasi-pure-projectivity. (**58** #11173)

20K35 Extensions

Arnal, Roland *n*-relèvements de groupes abéliens. (English summary) **53** #651

Bester, W. J. A. (*with* Viljoen, G.) On a problem in the extension theory of ab groups. **58** #28223

Beyl, F. Rudolf (*with* Hanna, Azmi) Ext $(\cdot, Z)$-reproduced abelian groups are f **54** #7659

Bican, Ladislav Splitting in abelian groups. **58** #928

Dempwolff, Ulrich On extensions of an elementary abelian group of order 2 GL(5, 2). **52** #14086

Hanna, Azmi *See* **Beyl, F. Rudolf**, **54** #7659

Hill, Paul (*with* Megibben, Charles) Extensions of torsion-complete groups. **49** #

Khabbaz, Samir (*with* Toubassi, Elias) Extensions of abelian groups of finite **51** #8290

Kulikov, L. Ja. Conditions under which the group of abelian extensions is zero. (Russian) **48** #6284

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Clifford, Alfred Hoblitzelle and Wallace, Alexander Doniphan ★{Collection of articles dedicated to Alfred Hoblitzelle Clifford on the occasion of his 65th birthday and to Alexander Doniphan Wallace on the occasion of his 68th birthday}. (51 #5224)
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Surmanidze, O. È. Weakly linearly compact topological abelian groups. (Russian. Georgian and English summaries) (**52** #10907)

Watanabe, Tadashi On the characterization of uniform movability for compact connected abelian groups. (Serbo-Croatian summary) (**55** #9085)

Wigner, David Algebraic cohomology of topological groups. (**49** #2898)

22Bxx Locally compact abelian groups (LCA groups)

Secondary classifications:

Bourbaki, Nicolas ★Спектральная теория. (Russian) [Spectral theory] (**50** #10816)

(Gorin, E. A.) *See* **Bourbaki, Nicolas,** (**50** #10816)

(Gurarii, V. P.) *See* **Bourbaki, Nicolas,** (**50** #10816)

22B05 General properties and structure of LCA groups

Armacost, D. L. Mapping properties of characters of LCA groups. **46** #7441
  (*with* Armacost, W. L.) On *p*-thetic groups. **48** #8680
  (*with* Armacost, W. L.) On *Q*-dense and densely divisible LCA groups. **46** #5527
  Remark on my paper: "Generators of monothetic groups". **47** #5170
  (*with* Bruner, R. R.) Locally compact groups without distinct isomorphic closed subgroups. **48** #8681
  On pure subgroups of LCA groups. **49** #10813
  Compactly cogenerated LCA groups. **58** #16944a (E **58** #16944b)
  Correction to: "Compactly cogenerated LCA groups". **58** #16944b

Armacost, W. L. *See* **Armacost, D. L., 46** #5527 *and* **Armacost, D. L., 48** #8680

Borodjanskiĭ, B. M. On the theory of group representations in certain spaces. (Russi
58 #16945

Brown, Ronald (*with* Higgins, Philip J.; Morris, Sidney A.) Countable products a
sums of lines and circles: their closed subgroups, quotients and duality properti
56 #12168

Bruner, R. R. *See* **Armacost, D. L., 48** #8681

Corwin, Lawrence Uniqueness of topology for the *p*-adic integers. **54** #2865

Dietrich, William E., Jr. Dense decompositions of locally compact groups. **47** #6935

Fulp, Ronald O. Splitting locally compact abelian groups. **45** #3629

Graham, Colin C. Compact independent sets and Haar measures. **47** #2001

Ha, Kwang Chul The radical of topological abelian groups. **52** #649

Higgins, Philip J. *See* **Brown, Ronald; et al., 56** #12168

Hunt, David C. (*with* Morris, Sidney A.; Van der Poorten, Alfred J.) Closed subgrou
of products of reals. **51** #8329

Janakiraman, S. (*with* Rajagopalan, M.) Topologies in locally compact groups. I
47 #3593

Khan, M. A. The existence of certain homomorphisms in locally compact abeli
groups. **51** #13124
  A notion of purity in locally compact groups. **55** #5787
  Generalized locally compact locally cyclic groups. **58** #16946

Lin, You Feng (*with* McWaters, M. M.) On the triviality of the law $(xy)(zx)=yz$
46 #9228

McWaters, M. M. *See* **Lin, You Feng, 46** #9228

Miller, C. Brandt (*with* Rajagopalan, M.) Topologies in locally compact groups. III
51 #10525

Morris, Sidney A. Locally compact abelian groups and the variety of topological group
generated by the reals. **45** #3630 (E **51** #5840)
  Erratum to: "Locally compact abelian groups and the variety of topologica
groups generated by the reals" (Proc. Amer. Math. Soc. **34** (1972), 290–292). **51** #5840
  ★Pontryagin duality and the structure of locally compact abelian groups. **56** #529
  See also **Hunt, David C.; et al., 51** #8329 *and* **Brown, Ronald; et al., 56** #1216

Moskowitz, Martin Some results on groups with unique square roots. **49** #456

Muhin, Ju. N. The number of generating elements of a locally compact abelian group
(Russian) **56** #530

Nienhuys, J. W. Some examples of monothetic groups. **51** #10526

Olubummo, A. (*with* Rajagopalan, M.) Anti-self dual groups. **54** #10474

Plaumann, Peter Fixelemente von Automorphismen nulldimensionaler abelscher Gruppen. **47** #3594

Polec'kih, V. M. Certain types of groups of rank one. (Russian) **51** #10527

Protasov, Ī. V. Topological dualisms of locally compact abelian groups. (Russian
57 #12763

Rajagopalan, M. (*with* Subrahmanian, H.) Dense subgroups of locally compact groups
54 #5381
  See also **Janakiraman, S., 47** #3593; **Miller, C. Brandt, 51** #10525 *and* **Olubummo, A., 54** #10474

Roeder, David W. Category theory applied to Pontryagin duality. **50** #13365

Scheinberg, Stephen Homeomorphism and isomorphism of abelian groups. **50** #4809

Subrahmanian, H. *See* **Rajagopalan, M., 54** #5381

Sulley, L. J. On countable inductive limits of locally compact Abelian groups. **47** #6936

Takamatsu, Reri On polythetic groups. **53** #697

Tatsuuma, Nobuhiko Prime ideals in the dual objects of locally compact groups. **45** #3631

Van der Poorten, Alfred J. *See* **Hunt, David C.; et al., 51** #8329

Venkataraman, Rangachari Interval of group topologies satisfying Pontryagin duality
56 #5775

Secondary classifications:

Brown, Gavin Idempotents in the closure of the characters. (**46** #5937)

Huang, Ter Jenq On topologies of maximally almost periodic groups. (**58** #6939)

Meyer, Yves ★Nombres de Pisot, nombres de Salem et analyse harmonique. (**58** #27890)

Nummela, Eric C. The projective dimension of a compact abelian group. (**47** #1917)

Otaki, Hiroshi Remarks on characterization of locally compact abelian groups. (**55** #10964)

Schreiber, Jean-Pierre Approximations diophantiennes et problèmes additifs dans les groupes abéliens localement compacts. (**51** #416)

Surmanidze, O. È. Weakly locally compact abelian groups. (Russian) (**54** #5372)

Talagrand, Michel Sommes vectorielles d'ensembles de mesure nulle. (**57** #17119)

22B10 Structure of group algebras of LCA groups

Secondary classifications:

Durbin, John R. Spherical functions on wreath products. (**58** #2033)

Osipov, V. F. A generalization of a theorem of Varopoulos. (Russian. English summary)
(**57** #1025)

22B99 None of the above, but in this section

Sharpe, Kevin J. Relating group topologies by their continuous points. **54** #10475

Secondary classifications:

Baker, R. C. A diophantine problem on groups. III. (**45** #2408)

Lawrence G. Locally compact abelian groups with trivial multiplier group. #6122)

, Susanne (*with* Warken, Stefan) Some examples in connection with Pontryagin's ality theorem. (**58** #16943)

skiĭ, A. Ja. A locally compact abelian group with trivial two-dimensional Banach homology is compact. (Russian) (**46** #4110)

, Keith A note on local field duality. (**57** #16265)

y, Gábor J. Statistical theory of topological groups. (**57** #17755)

n, Stefan *See* **Dierolf, Susanne,** (**58** #16943)

5 Compact groups

, V. K. A certain property of the torus. (Russian) **48** #11387

t, Wolfgang Untersuchung zu Kommutatorgruppen und Bohrkompaktifizierung zentralen und kompakten Gruppen. **49** #457 (EA **49**)

Untersuchungen zur Kommutatorgruppe in zentralen und kompakten ologischen Gruppen. II. **50** #533

nn, Karl Heinrich (*with* Mostert, Paul S.) ★Cohomology theories for compact elian groups. **51** #8330

itz, Gerald L. On the density character of compact topological groups. **46** #3684

n, Russell A. Representations of compact groups on topological vector spaces: me remarks. **55** #3151

juk, M. I. The complementability of subgroups in compact groups. (Russian) #7442

n, Robert R. The topology of compact simple Lie groups is essentially unique. #10145

, A. N. (*with* Savel'ev, M. V.) A certain parametrization of compact groups. ussian) **51** #785

kov, O. V. The automorphism groups of compact totally disconnected abelian oups. (Russian) **49** #9113

Compactness conditions for the automorphism groups of topological groups. ussian) **54** #12958

, Sidney A. Free compact abelian groups. **47** #2002

rt, Paul S. *See* **Hofmann, Karl Heinrich, 51** #8330

, Ju. N. The Frattini subgroup of a topological group. (Russian) **47** #5171

Complements in subgroups of compact groups. (Russian) **57** #12764

lfa, F. È. The limits of direct systems of compact groups. (Russian. Georgian and nglish summaries) (See Zbl **277** #22003)

nela, Eric C.) *See* **Hofmann, Karl Heinrich; et al., 51** #8330

tke, Detlev Einige Eigenschaften des Darstellungsringes kompakter Gruppen. #3020

The coproduct of two circles. **53** #698

kih, V. M. Topological groups with a compactness condition for the classes of njugate elements. (Russian) **56** #5776

er, Helmut On subgroups of compact Lie groups which are almost characteristic. #3021

lov, A. S. Representations of profinite groups, and orthonormal systems. (Russian) #519

r, Harald Uniformly distributed sequences in quotient groups. **55** #10601

blatt, Joseph Max Totally-disconnected compact metric groups. **55** #560

rt, Wolfgang Über kompakte rechtstopologische Gruppen mit gleichgradig etigen Linkstranslationen. **53** #5804

ev, M. V. *See* **Leznov, A. N., 51** #785

rer, Hans Sur la topologie des groupes compacts connexes. **49** #458

Restklassenräume kompakter zusammenhängender Gruppen mit Schnitt. #4191

e, Kevin J. Two properties of R^N with a compact group topology. **45** #2083

A. I. Dual objects of compact and discrete groups. (Russian. English summary) #8748

i, Kazuo Dimension of compact groups and their representations. **46** #9229

econdary classifications:

, Robert F. Fixed points of endomorphisms of compact groups. (**48** #9747)

s, Lester E. Measurable tail disintegrations of the Haar integral are purely finitely dditive. (**54** #13029)

, Charles F. (*with* Ramirez, Donald E.) Fourier-Stieltjes transforms and weakly most periodic functionals for compact groups. (**46** #7806)

rds, Robert E. ★Integration and harmonic analysis on compact groups. 6 #9183)

★Integration and harmonic analysis on compact groups. (**57** #17116)

Talamanca, Alessandro (*with* Price, John F.) Rudin-Shapiro sequences on compact roups. (**47** #3908)

Multipliers vanishing at infinity for certain compact groups. (**57** #1022)

ners, Toon On cardinal numbers related to the Banach spaces $L^p(G)$ and $M(G)$. 4 #3293)

y, Feza Exceptional groups and elementary particles. (**58** #8867)

fson, William H. What is the probability that two group elements commute? 8 #6243)

ler, Donald Compact groups of real power need not be metrizable. (**56** #1271)

ing, James E. On the shape of torus-like continua and compact connected pological groups. (**47** #7686)

The Čech homology of compact connected abelian topological groups with pplications to shape theory. (**53** #9138)

Some examples in shape theory using the theory of compact connected abelian pological groups. (**55** #9084 (EA **55/56**))

Ronald J. The Lefschetz fixed point theorem for compact groups. (**56** #13204)

n, Wayne The structure of compact connected groups which admit an expansive utomorphism. (**52** #11873)

t, Viktor Uniformly distributed sequences on compact, separable, non-metrizable groups. (**57** #16236)

Almost constant sequences of transformations. (**57** #16237)

Meisters, Gary H. A Guichard theorem on connected monothetic groups. (**49** #1004)

Price, John F. *See* **Figà-Talamanca, Alessandro,** (**47** #3908)

Ramirez, Donald E. *See* **Dunkl, Charles F.,** (**46** #7806)

Rider, Daniel Central idempotent measures on compact groups. (**49** #5711)

Rosenblatt, Joseph Max Uniform distribution in compact groups. (**55** #2820)

Sankaran, S. Imprimitivity and duality theorems. (Italian summary) (**47** #5176)

Selesnick, Stephen A. Tensor products and injective G-modules for a compact group G. (**47** #4019)

Spector, René Fonctions radiales sur les groupes compacts totalement discontinus. (**46** #612)

Stanton, Robert J. (*with* Tomas, Peter A.) Convergence of Fourier series on compact Lie groups. (**53** #6241)

Tatsuuma, Nobuhiko Uniqueness of the Plancherel measure as an invariant measure over the dual objects of compact groups. (**47** #6939)

Tomas, Peter A. *See* **Stanton, Robert J.,** (**53** #6241)

Zinde, V. M. A semi-invariant integral with values in a group. (Russian) (**50** #579)

22Dxx Locally compact groups and their algebras

Gaal, Steven A. ★Linear analysis and representation theory. **56** #5777

Gelbart, Stephen S. Introduction to the theory of group representations. **57** #12765

Secondary classifications:

Mosak, Richard D. ★Banach algebras. (**54** #3406)

22D05 General properties and structure of locally compact groups

Abels, Herbert Specker-Kompaktifizierungen von lokal kompakten topologischen Gruppen. **49** #9114

On a problem of Freudenthal's. **57** #6279

Akemann, Charles A. (*with* Walter, Martin E.) Non-abelian Pontriagin duality. **47** #3595

Albu, Adrian C. Sur un lemme de J. Szenthe. **58** #28253

Anderson, D. H. Closed subgroups of a locally compact group. **45** #6974

Antonovskiĭ, M. Ja. (*with* Mironov, A. V.) On the theory of topological l-groups. (Russian. Uzbek summary) **46** #5528

Armacost, D. L. (*with* Armacost, W. L.) Uniqueness in structure theorems for LCA groups. **58** #28254

Armacost, W. L. *See* **Armacost, D. L., 58** #28254

Baker, John A. *See* **Jou, S. S., 50** #13366

Benzinger, Leonora Uniformly distributed sequences in locally compact groups. I, II. **48** #11388

Boseck, Helmut The 5th Hilbert-problem. **52** #8325

(*with* Czichowski, Günter) On the structure of connected locally compact groups. **55** #5788

Čarin, V. S. A class of topological FC-groups. (Russian) **56** #15823

Czichowski, Günter *See* **Boseck, Helmut, 55** #5788

Derighetti, Antoine On the property of P_1 of locally compact groups. **46** #3685

van Dijk, Gerrit The property P_1 for semisimple $\mathfrak{p}$-adic groups. **46** #1959

Djoković, Dragomir Ž. The union of compact subgroups of a connected locally compact group. **58** #16947

Dodson, M. M. Nilpotent topological groups. **48** #6315

Durbin, John R. On locally compact wreath products. **51** #13125

Gard, James R. Kernels of homomorphisms of topological groups. **50** #10146

Guivarc'h, Yves Croissance polynomiale et périodes des fonctions harmoniques. **51** #5841

Croissance des groupes résolubles localement compacts. **47** #8760

Hofmann, Karl Heinrich Sur la décomposition semidirecte des groupes compacts connexes. **53** #5805

Homenko, S. P. Closures of rational groups. (Russian) **52** #14144

Topological groups whose normal subgroups are all monothetic. (Russian) **53** #10972

Topological groups with normal nonmonothetic subgroups. (Russian) **53** #10973

See also **Muhin, Ju. N., 57** #3302; **Muhin, Ju. N., 57** #12767 *and* **Muhin, Ju. N., 58** #11210

Houghton, C. H. Ends of locally compact groups and their coset spaces. **50** #10147

Huang, Ter Jenq Note on maximally almost periodic groups. **54** #460

Itzkowitz, Gerald L. Continuous measures, Baire category, and uniform continuity in topological groups. **51** #8331

Uniform structure in topological groups. **53** #8320

Jenkins, J. W. Free semigroups and unitary group representations. **47** #395

A characterization of growth in locally compact groups. **47** #5172

Growth of connected locally compact groups. **50** #2388

Følner's condition for exponentially bounded groups. **51** #5842

A fixed point theorem for exponentially bounded groups. **54** #2866

Jou, S. S. (*with* Baker, John A.) On transformations of measurable sets in locally compact topological groups. (Serbo-Croatian summary) **50** #13366

Kabenjuk, M. I. Normal subgroups of locally compact groups. (Russian) **53** #699

Kallman, Robert R. The existence of invariant measures on certain quotient spaces. **48** #8682

A uniqueness result for topological groups. **54** #5382

Khan, M. A. Generalized locally compact locally cyclic groups. **57** #12766

Lahiri, B. K. On translations of sets in topological groups. **58** #997

Lakshmi, A. Coherent pair of extensions of locally compact groups. **46** #1952

Lam, Ling Fai Automorphisms on locally compact groups. (Serbo-Croatian summary) **54** #461

Lee, Dong Hoon On the homomorphisms of locally compact groups. **47** #5173

On deformations of homomorphisms of locally compact groups. **55** #8244

Liukkonen, John R. Dual spaces of groups with precompact conjugacy classes. **47** #6937

Matusov, Ĭ. B. *See* **Moskalenko, Z. Ī., 53** #8321

Maxones, W. (*with* Rindler, Harald) Lokalkompakte Gruppen, in denen jede abgeschlossene, nicht normale Untergruppe offen ist. **58** #6050

Mironov, A. V. *See* **Antonovskiĭ, M. Ja., 46** #5528

Moore, Calvin C. Group extensions and cohomology for locally compact groups. III. **54** #2867

Group extensions and cohomology for locally compact groups. IV. **54** #2868

Morris, Sidney A. Maximally almost periodic groups and varieties of topological groups. **49** #459

Local compactness and free products of topological groups. **57** #521

(*with* Nickolas, Peter) Locally compact group topologies on an algebraic free product of groups. **53** #3186

Moskalenko, Z. Ī. Locally compact supersolvable groups. (Russian) **48** #6316

(*with* Matusov, Ĭ. B.) The unique determination of a locally compact topology on a group by a system of closed subgroups. (Russian. English summary) **53** #8321

The rank of connected locally compact groups. (Russian) **54** #462

A condition for the finiteness of the rank of locally compact solvable groups. (Russian) **55** #5789

On the question of the locally compact topologization of a group. (Russian) **58** #11208

An estimate of the rank of locally compact solvable groups. (Russian) **58** #11209

Muhin, Ju. N. (*with* Staruhina, E. N.) Connected groups of finite rank. (Russian) **48** #4192

(*with* Staruhina, E. N.) Groups of finite rank. (Russian) **52** #10946

Projectivities of compact p-groups. II. (Russian) **53** #8322

(*with* Homenko, S. P.) Topological Šmidt groups. (Russian) **57** #3302

(*with* Homenko, S. P.) Connected groups whose normal subgroups are all abelian. (Russian) **57** #12767

(*with* Homenko, S. P.) Finitely generated connected groups. (Russian) **58** #11210

Ng, Kai-Wang Quasi-invariant measures in groups of second category. **55** #3152 (EA 58)

Nickolas, Peter *See* **Morris, Sidney A., 53** #3186

Oler, N. Note on a theorem of Weil-Abels. **48** #4193

Ostapenko, V. V. Linear topological N-groups. (Russian) **58** #11211

Paalman-de Miranda, Aïda B. A note on W-groups. **50** #13367

Perlt, Edeltraut (*with* Strambach, Karl) Die Norm lokal kompakter Gruppen. **48** #8683

Peterson, H. Leroy Discontinuous characters and subgroups of finite index. **47** #5174

Plaumann, Peter Lokal kompakte Gruppen mit gleichmässig beschränkten Konjugiertenklassen. **54** #12959

Poguntke, Detlev Zwei Klassen lokalkompakter maximal fastperiodischer Gruppen. (English summary) **54** #12960

Chu-Dualität und zwei Klassen maximal fastperiodischer Gruppen. (English summary) **54** #12961

Polec′kih, V. M. Certain discreteness conditions that can be imposed on topological groups. (Russian) **47** #5175

Locally compact groups with an inductivity condition for closed subgroups. (Russian) **48** #8684

Topological groups with a compact space of classes of conjugate elements. (Ukrainian. English and Russian summaries) **49** #5218

Weakly divisible topological p-groups. (Ukrainian. English and Russian summaries) **51** #786

Layer-compact nilpotent groups. (Russian) **52** #5857

ZA-groups with an induction condition for normal divisors. (Russian. English summary) **54** #2869

Some properties of groups with an inductivity condition for subgroups. (Russian. English summary) **55** #561

Locally compact locally nilpotent groups with the inductivity condition for serving subgroups. (Russian) **55** #8245

Topological groups that are nearly groups of rank one. (Russian) **55** #5790

Topological isolator of a subgroup of finite rank. (Russian) **57** #522

Protasov, Ī. V. Closed invariant subgroups of locally compact groups. (Russian) **58** #998

Projection of connected groups. (Russian. English summary) **58** #999

Rana, Inder K. On a characterization of locally compact groups of second category, assuming the continuum hypothesis. **57** #6280

Rindler, Harald Approximate units in ideals of group algebras. **58** #11212

See also **Maxones, W., 58** #6050

Robertson, Lewis C. Appendix: Two counterexamples. **57** #6281

Rudenko, V. A. A certain topological variant of the property of complete factorizability of a group. (Ukrainian. English and Russian summaries) **50** #10148

Sankaran, S. Imprimitivity and duality theorems. (Italian summary) **47** #5176

Schlichting, Günter Eine Charakterisierung gewisser diskreter Gruppen durch ihre reguläre Darstellung. (English summary) **48** #2302

Topologische Gruppen mit endlichen Klassen konjugierter Elemente. **51** #3348

Singer, Michael One parameter subgroups and nonstandard analysis. **53** #700

Sit, Kwan-Yuk Claire Compactness of certain homogeneous spaces of locally compact groups. **54** #12962

Sit, Kwan-Yuk Law On centralizers of generalized uniform subgroups of locally compact groups. **50** #7400

Staruhina, E. N. Topological groups with a coatomic lattice of closed subgroups. (Russian) **57** #12768

See also **Muhin, Ju. N., 48** #4192 *and* **Muhin, Ju. N., 52** #10946

Štern, A. I. The connection between the topologies of a locally bicompact group and its dual space. (Russian) **45** #3639

Strambach, Karl Eine Bemerkung zur Nilpotenz lokal kompakter Gruppen. (English summary) **51** #10528

See also **Perlt, Edeltraut, 48** #8683

Struble, Raimond A. Metrics in locally compact groups. **50** #535

Szenthe, J. On the topological characterization of Lie groups and transitive Lie g actions. **50** #13369

On the topological characterization of transitive Lie group actions. **50** #133

Tatsuuma, Nobuhiko Plancherel formula for non-unimodular locally compact gro **45** #8777

Walter, Martin E. *See* **Akemann, Charles A., 47** #3595

Wang, Shu Ping On density properties of S-subgroups of locally compact gro **45** #444

Compactness properties of topological groups. III. **51** #10529

Wilcox, Theodore W. A note on groups with relatively compact conjugacy cla **48** #8685

Wu, Ta Shên (*with* Yu, Ying King) Compactness properties of topological gro **47** #6938

Locally compact topological groups with finitely generated abelian unif subgroups. **52** #3426

(*with* Yu, Ying King) Compactness conditions in topological groups. **52** #10

Yu, Ying King *See* **Wu, Ta Shên, 47** #6938 *and* **Wu, Ta Shên, 52** #10947

Żelazko, Wiesław On the Burnside problem for locally compact groups. **53** #701

Zerling, David (CA) topological groups. **54** #463

Secondary classifications:

Abels, Herbert Enden von Räumen mit eigentlichen Transformationsgruppen. (**47** #5852)

Barit, William (*with* Renaud, Peter) There are no uniquely homogeneous spaces. (**57** #4122)

Charretton, Christine (*with* Richard, Denis) Théorème d'Ascoli et application aux groupes topologiques localement compacts en analyse non standard. (**52** #9161)

Corwin, Lawrence Decomposition of representations induced from uniform subgrou and the "Mackey machine". (**54** #468)

Derighetti, Antoine Sur la propriété P_1. (English summary) (**55** #3680)

Hazod, Wilfried Probabilities on totally disconnected locally compact groups. (**58** #7769)

Hennion, Hubert Sur la récurrence et la transience dans les espaces homogènes. (**58** #7858)

Lai, Han Ch'ing (*with* Lien, Ming Chiao) Isomorphism theorem of the spaces L^p(G (**53** #8781)

Lien, Ming Chiao *See* **Lai, Han Ch'ing,** (**53** #8781)

Mocanu, Constanţa A certain invariant of H. Leptin. (Romanian. English summar (**55** #12861)

Moskalenko, Z. Ī. An estimate of the rank of connected locally compact nilpote groups. (Russian) (**56** #15829)

Peterson, H. Leroy Extensions of Haar measure to relatively large nonmeasurab subgroups. (**55** #8686)

Rajagopalan, M. (*with* Schreiber, Bertram M.) Ergodic automorphisms and affine transformations of locally compact groups. (**46** #5582)

Renaud, Peter *See* **Barit, William,** (**57** #4122)

Richard, Denis *See* **Charretton, Christine,** (**52** #9161)

Rindler, Harald Ein Problem aus der Theorie der Gleichverteilung. II. (**50** #2107)

Ein Problem aus der Theorie der Gleichverteilung. I. (**50** #2106)

Satō, Ryōtarō Properties of ergodic affine transformations of locally compact group III. (**45** #3675)

Schreiber, Bertram M. *See* **Rajagopalan, M.,** (**46** #5582)

Thomas, R. K. On affine transformations of locally compact groups. (**46** #5586)

Yang, C. T. Hilbert's fifth problem and related problems on transformation group (**54** #13948)

22D10 Unitary representations of locally compact groups

Abbati, Maria C. (*with* Cirelli, Renzo; Gallone, Franco) G-Hilbert bundles. **54** #287

Arsac, Gilbert Sur un espace fonctionnel associé à une représentation unitaire d'u groupe localement compact. (English summary) **52** #5858

Sur l'espace de Banach engendré par les coefficients d'une représentation unitair **56** #3180

Azencott, Robert (*with* Parry, William) Stability of group representations and Haa spectrum. **46** #9230

Bagchi, S. C. (*with* Mathew, Joseph; Nadkarni, M. G.) On systems of imprimitivity o locally compact abelian groups with dense actions. **54** #7690

Baggett, Larry Multiplier extensions other than the Mackey extension. **53** #13468

(*with* Taylor, Keith F.) Riemann-Lebesgue subsets of $\mathbf{R}^n$ and representatio which vanish at infinity. **57** #16462

Blackadar, Bruce E. The regular representation of restricted direct product group **55** #12860

Borel, Armand ★Représentations de groupes localement compacts. **54** #2871

Bouvier, Anne-Marie La formule de Plancherel pour les groupes localement compac séparables. (English summary) **56** #3181

Brezin, Jonathan Geometry and the method of Kirillov. **52** #8326

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22D45 Automorphism groups of locally compact groups

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22E10 General properties and structure of complex Lie groups

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Cornwell, J. F. The centralizer of a compact simple subgroup of a classical compact simple Lie group. 45 #446

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22E15 General properties and structure of real Lie groups

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Fischer, Wolfgang *See* **Grauert, Hans; et al.**, **51** #819
Freĭman, L. S. ★Теоремы существования. (Russian) [Existence theorems] **52** #14180
Fröberg, Carl-Erik *See* **Aulin, Allan**, **51** #820
Goffman, Casper Lebesgue equivalence. **56** #15849
Grauert, Hans (*with* Lieb, Ingo; Fischer, Wolfgang) ★Дифференциальное и интегральное исчисление. (Russian) [Differential and integral calculus] **51** #819
Haupt, Otto *See* **Aumann, Georg**, **50** #4836
Hewitt, Edwin (*with* Stromberg, Karl) ★Real and abstract analysis. **51** #3363
Klambauer, Gabriel ★Mathematical analysis. **52** #14182
(Kołodziej, W.) *See* **Kuratowski, Kazimierz**, **50** #2411 *and* **Kuratowski, Kazimierz**, **50** #2412
Kowalsky, Hans-Joachim ★Vektoranalysis. II. **52** #14181
(Kreines, Klaus) *See* **Smirnov, V. I.**, **50** #4842
Kuratowski, Kazimierz ★Introduction to calculus. **50** #2411
★Rachunek różniczkowy i całkowy. Funkcje jednej zmiennej. (Polish) [Differential and integral calculus. Functions of one variable] **50** #2412
(Libin, Z. G.) *See* **Courant, Richard**, **51** #817 *and* **Courant, Richard**, **51** #818
Lieb, Ingo *See* **Grauert, Hans; et al.**, **51** #819
Lima, Elon Lages ★Análise geométrica. (Portuguese) [Geometrical analysis] **52** #14183
Lorenzen, P. ★Differential and integral. A constructive introduction to classica analysis. **49** #10823
Maak, Wilhelm ★Differential- und Integralrechnung. **50** #2413
Marcus, Solomon *See* **Nicolescu, Miron; et al.**, **50** #4839 *and* **Nicolescu, Miro** **50** #4840
(Musielak, Julian) *See* **Kuratowski, Kazimierz**, **50** #2411
Nevanlinna, Frithiof (*with* Nevanlinna, R.) ★Absolute analysis. **49** #10824
Nevanlinna, R. *See* **Nevanlinna, Frithiof**, **49** #10824
Nicolescu, Miron (*with* Dinculeanu, Nicolae; Marcus, Solomon) ★Analiză matematică. I. (Romanian) [Mathematical analysis. I.] **50** #4839
(*with* Dinculeanu, Nicolae; Marcus, Solomon) ★Analiză matematică. II. (Romanian) [Mathematical analysis. II] **50** #4840
Nikol′skiĭ, S. M. ★Курс математического анализа. Томы I, II. (Russian) [A c mathematical analysis. Vols. I, II.] **50** #7439
(Pauc, C. Y.) *See* **Aumann, Georg; et al.**, **50** #4836
Pini, B. ★Primo corso di analisi matematica. **50** #13387
(Rabinovič, Ju. L.) *See* **Courant, Richard**, **51** #817 *and* **Courant, Richard**, **51** #
Rudin, Walter ★Principles of mathematical analysis. **52** #5893
Sikorski, Roman ★Diferenciální a intrgrální počet. Funkce více proměnných. ([Differential and integral calculus. Functions of several variables] **50** #4841
Smirnov, V. I. ★Lehrgang der höheren Mathematik. Teil II. **50** #4842
Stromberg, Karl *See* **Hewitt, Edwin**, **51** #3363
(Vaĭnšteĭn, I. A.) *See* **Grauert, Hans; et al.**, **51** #819

Secondary classifications:

Beals, Richard ★Advanced mathema'ical analysis. Periodic functions and distrib complex analysis, Laplace transform and applications. (**58** #26624)
(Bögel, Karl) *See* **Natanson, I. P.**, (**53** #13499)
Kušner, B. A. ★Лекции по конструктивному математическому анализу. (R [Lectures on constructive mathematical analysis] (**52** #53)
Luxemburg, Wilhelmus Anthonius Josephus What is nonstandard analysis? (**48** #
Müller, Paul Heinz ★Höhere Analysis. I. (**50** #12507)
Natanson, I. P. ★Theorie der Funktionen einer reellen Veränderlichen. (**53** #13
Savel′ev, L. Ja. ★Лекции по математическому анализу. Часть 4. (Russian) [Le on mathematical analysis. Part 4] (**53** #14119)
Zalcman, Lawrence Real proofs of complex theorems (and vice versa). (**48** #637

26–03 Historical

Colman, J. G. The differentiation of a function of a function. **58** #11258 #11259)
See also **Shenton, L. R.**, **58** #11259
Medvedev, F. A. ★Очерки истории теории функций действительного переме (Russian) [Essays on the history of the theory of functions of a real variable] (S **362** #26005)
Mišík, Ladislav Derivation and continuity. (Slovak) **58** #6094
Shenton, L. R. On note 3280: "The differentiation of a function by a function" (Gaz. **54** (1970), no. 390, 389) by J. G. Colman. **58** #11259

Secondary classifications:

(Baire, René) *See* **Dugac, P.**, (**58** #15944)
(de Beaune, Florimond) *See* **Bernoulli, Johann**, (**58** #26930d)
Bernoulli, Jacques Solution of a problem of my brother that was sent to Leipzi days before the Ides of May. (Russian) (**58** #26930e)
Bernoulli, Johann Solution of a problem that was presented to Descartes by de B (Russian) (**58** #26930d)
See also **Bernoulli, Jacques**, (**58** #26930e)
(Bolzano, Bernard) *See* **van Rootselaar, Bob**, (**58** #4885)
Bos, H. J. M. Differentials, higher-order differentials and the derivative in the Leibnizian calculus. (**57** #9407)
(Descartes, René) *See* **Bernoulli, Johann**, (**58** #26930d)
Dugac, P. Notes et documents sur la vie et l'oeuvre de René Baire. (**58** #15944)
Flett, Thomas Muirhead Some historical notes and speculations concerning the value theorems of the differential calculus. (**55** #12422)
Huygens, Christiaan A letter to the author [to Leibniz]. (Russian) (**58** #26930c)
Juškevič, A. P. ★Die Entwicklung des Funktionsbegriffs. (**50** #6748)
Kertész, Andor Centenary of the exact definition of the real numbers. (Hun German summary) (**48** #1853)
Korencova, M. M. A kinematic-geometric model of analysis in C. Maclaurin's *Tre fluxions*. (Russian) (**58** #21176)
(Kravčuk, M. P.) *See* **Movčan, V. O.**, (**58** #15993)
Larsen, Ronald Vibrating strings, Fourier series, and some aspects of mather analysis. (**50** #9488)
Laugwitz, Detlef Zur Entwicklung der Mathematik des Infinitesimalen und Inf (**52** #7773)
Lehto, Olli The integral through the ages. (Finnish. English summary) (**57** #120
Leibniz, Gottfried Wilhelm A supplement to the geometry of dimensions, or th general realization of all quadratures by means of a motion; and also a m construction of lines from a given property of tangents. (Russian) (**58** #2693
See also **Bos, H. J. M.**, (**57** #9407) *and* **Huygens, Christiaan**, (**58** #2693
Ljusternik, L. A. (*with* Petrova, Svetlana S.) From the history of symbolic ca

Russian) (**58** #21219)

laurin, C.) *See* **Korencova, M. M.**, (**58** #21176)

edev, F. A. ★Французская школа теории функций и множеств на рубеже XIX–XX вв. (Russian) [The French school of function theory and set theory abroad uring the XIX–XXth centuries] (**58** #27028)

r, Maximilian Karl Marx' Begründung der Differentialrechnung. (**49** #2226)

nović, Dragoslav S. (*with* Vasić, Petar M.) History, variations and generalisations f the Čebyšev inequality and the question of some priorities. (**55** #10200)

an, V. O. M. P. Kravčuk's works on the theory of functions of a real variable. Ukrainian) (**58** #15993)

ova, O. A.) *See* **Leibniz, Gottfried Wilhelm**, (**58** #26930b); **Bernoulli, Johann**, **58** #26930d) *and* **Bernoulli, Jacques**, (**58** #26930e)

va, Svetlana S. *See* **Ljusternik, L. A.**, (**58** #21219)

Rootselaar, Bob Bolzano's corrections to his *Functionenlehre*. (**58** #4885)

kow-Christow, Swetoslaw Leibniz und die zweite Krise in der Mathematik. **58** #21235)

an, A. B. Some questions on the history of mathematical analysis and on the volution of computational means. (Russian) (**58** #26930a)

See also **Leibniz, Gottfried Wilhelm**, (**58** #26930b); **Huygens, Christiaan**, **58** #26930c); **Bernoulli, Johann**, (**58** #26930d) *and* **Bernoulli, Jacques**, **58** #26930e)

or, Angus E. The differential: nineteenth and twentieth century developments. **58** #15979)

ć, Petar M. *See* **Mitrinović, Dragoslav S.**, (**55** #10200)

6–04 Explicit machine computation and programs (not the theory of computation or programming)

Secondary classifications:

kin, O. V. A method of determining functions by an analytic expression. (Russian) (**58** #28336)

6–06 Collections of papers; proceedings of conferences

standard methods ★Nonstandard methods. (Japanese) **58** #28333

nposium:

Nonstandard Methods *See* **Nonstandard methods**, **58** #28333

Secondary classifications:

ckenbach, Edwin F.) *See* **General inequalities**, (**57** #15806)

xemburg, Wilhelmus Anthonius Josephus) *See* **Contributions to nonstandard analysis**, (**57** #16517)

binson, Abraham) *See* **Contributions to nonstandard analysis**, (**57** #16517)

nference:

General Inequalities *See* **General inequalities**, (**57** #15806)

ntributions to nonstandard analysis ★Contributions to non-standard analysis. (**57** #16517)

neral inequalities ★General inequalities. I. (**57** #15806)

qualities *See* **General inequalities**, (**57** #15806)

nstandard analysis *See* **Contributions to nonstandard analysis**, (**57** #16517)

erwolfach *See* **General inequalities**, (**57** #15806)

26A03 Foundations: limits and generalizations, elementary topology of the line

itin, G. S. *See* **Zaslavskiĭ, I. D.**, **45** #6984

mjanov, Blagovest P. (*with* Danov, Dimit″r L.; Hristov, Hristo Ja.) Sets of asymptotic numbers that are closed under each of the four algebraic operations. (Russian) **58** #11260

nov, Dimit″r L. *See* **Damjanov, Blagovest P.; et al.**, **58** #11260

anek, Miloš Über eine Konstruktion reeler Zahlen. I. **48** #468

ffman, Casper Completeness of the real numbers. **49** #472

guadze, D. F. Double and iterated limits. (Russian. Georgian and English summaries) **58** #6095

ttwald, Siegfried Eine Konstruktion der reellen Zahlen "Unendlich". **47** #404

eatherly, Henry E. (*with* Hunkler, Richard) Convergence of $\{\frac{1}{n}\}$ and the Archimedean property. **50** #10164

ybov, B. K. The p-density of sets on the line. (Russian) **47** #5182

istov, Hristo Ja. *See* **Damjanov, Blagovest P.; et al.**, **58** #11260

nkler, Richard *See* **Heatherly, Henry E.**, **50** #10164

rawala, S. M. On a type of definite integrals. **49** #3054

ement, Heinz Reelle Funktionen als Hüllenoperationen. **55** #8269

fler, Jakob Partielle Differentiation und implizites Differenzieren. (Not reviewed)

rn, Henry *See* **Rotando, Louis M.**, **54** #10516

amar, Edvard The role of compactness in analysis. (Slovenian. English summary) **45** #468

nd, Detlef Abschnittsmengen von Größenbereichen und ihre algebraischen Eigenschaften. **52** #8345

alcolm, Wilfred G. Some structural features of the real and complex number systems and associated sub-systems. **48** #469

andelkern, Mark Connectivity of an interval. **52** #10966

ays, Michael (*with* Schleusner, John W.; Simons, William) Open sets from disjoint closed intervals. **50** #4843

etropolis, N. (*with* Stein, Myron Leo; Stein, Paul R.) On finite limit sets for transformations on the unit interval. **47** #5183

untean, Ioan The axiomatic defintion of the real numbers. (Romanian) **52** #8346

ais Gameiro, A. H. Two class-notes. **48** #4211

poviciu, Tiberiu À propos d'un lemme de Tadeusz Ważewski. **49** #10825

Prasad, S. N. An extension of Bolzano-Weierstrass theorem to the field of ultra real numbers. **45** #6983

Priest, Dean B. *See* **Wayland, Keith**, **54** #5400

Rotando, Louis M. (*with* Korn, Henry) The indeterminate form 0^0. **54** #10516

Schleusner, John W. *See* **Mays, Michael; et al.**, **50** #4843

Sendov, Blagovest H. Segment arithmetic and segment limit. **58** #22427a

Segment derivatives and Taylor's formula. **58** #22427b

Simoda, Seturo Sur un type de l'induction et sa dilatation aux ensembles totalement ordonnés. **46** #5533

Simons, William *See* **Mays, Michael; et al.**, **50** #4843

Stein, Myron Leo *See* **Metropolis, N.; et al.**, **47** #5183

Stein, Paul R. *See* **Metropolis, N.; et al.**, **47** #5183

Štrauch, Oto Minimal covering of a closed interval. (Slovak. English summary) **47** #3603

Strick, Heinz Klaus Rekursiv definierte Folgen mit irrationalen Grenzwerten. (See RŽMat 1975 #10 B888)

Strothotte, Dieter Hinreichende Kriterien für die Existenz von Extremstellen ohne Mittelwertsatz. (Not reviewed)

Takeuchi, Yu Reordering of the rational numbers. (Spanish) **50** #7440

Vamanamurthy, M. K. An alternative proof of completeness of the Euclidean space. **53** #10994

Wayland, Keith (*with* Priest, Dean B.) Another look at the countability of the rationals. **54** #5400

Wilczyński, Władysław On the family of sets of approximate limit numbers. **46** #303

Zaslavskiĭ, I. D. (*with* Ceĭtin, G. S.) Yet another constructive variant of the Cauchy theorem. (Russian. English summary) **45** #6984

Zorio Blanco, Valeriano Theorem on the bijection between the set of real numbers and the set of points of a straight line. (Spanish) **47** #5184

Secondary classifications:

Ceĭtin, G. S. The upper bounds of enumerable sets of constructive real numbers. (Russian) (**48** #77)

Davies, Roy O. A non-Prokhorov space. (**45** #2656 (E **47** #4215))

Demuth, Osvald Constructive pseudonumbers. (Russian) (**52** #2844)

The constructive analogue of the Denjoy-Young theorem on derived numbers. (Russian) (**53** #7736)

Jambon, Marc Sur la notion de variabilité locale constructive. (English summary) (**52** #2847)

Larman, D. G. A compact set of disjoint line segments in E^3 whose end set has positive measure. (**45** #7006)

Šurygin, V. A. Certain properties of the complexity of constructive real numbers. (Russian) (**58** #16211)

Wegmann, Helmut Das Hausdorff-Mass von Cantormengen. (**45** #2122)

26A06 One-variable calculus

Agrawal, J. C. *See* **Manickam, S.**, **48** #8697

Alpert, Louis I. The geometric invariance of tangents to curves $y=ax^r$. **54** #10517

Baxley, John V. (*with* Hayashi, Elmer K.) Indeterminate forms of exponential type. **58** #11261

Bobillo Guerrero, Pablo Derivative of the inverse of a function. (Spanish) **54** #5401

(Brudnyĭ, Ju. A.) *See* **Studies in the theory of functions of several real variables**, **58** #16998

Chaudhuri, P. K. Note on Taylor's remainder. **52** #5894

Climescu, Al. The extension of one of de l'Hôspital's rules. (Romanian. French summary) **48** #4212

Comtet, Louis (*with* Fiolet, Michel) Sur les dérivées successives d'une fonction implicite. **50** #553

Creighton, J. H. C. A strong second derivative test. **51** #13147

Davis, C. S. Remarks on a familiar formula. **58** #11262

Dujmović, Jozo J. Two integrals related to means. **48** #8696

Dumitriu, Anton Remarques sur les quadratures. **47** #6950

Eidswick, J. A. The differentiability of a^x. **50** #13389

Alternatives to Taylor's theorem in proving analyticity. **52** #8347

Ellis, Richard S. Volume of an N-simplex by multiple integration. **53** #13484

Fichera, E. Sur la fonction $(d^n/dt^n)\phi(r)=f(dr/dt, d^2r/dt^2, \dots, d^nr/dt^n)$. (English and German summaries) **53** #728

Fiolet, Michel *See* **Comtet, Louis**, **50** #553

Flett, Thomas Muirhead Ampère and the horizontal chord theorem. **56** #5805

Golberg, Michael A. Differentials in one dimension. **50** #2414

Gould, Henry W. Two remarkable extensions of the Leibniz differentiation formula. (Romanian summary) **48** #2314

Grossman, Michael (*with* Katz, Robert) ★Non-Newtonian calculus. **55** #3180

Hayashi, Elmer K. *See* **Baxley, John V.**, **58** #11261

Henderson, D. K. Tangency as an equivalence relation: an approach to differential calculus. **49** #10826

Ho, Tien Kung On a continuous analogue of almost convergence of sequences. **53** #13485

Hoffman, Anthony E. The Gram-Schmidt process is not so bad! **45** #5280

Inaita, Shiro On disjointness in fuzzy relations. (Japanese) **57** #3325

Īvanel, V. K. (*with* Kisīl′, R. I.; Maksimīv, Ē. M.) A generalized Maclaurin formula and its application. (Ukrainian. Russian summary) **58** #28334

Karcher, Hermann Analysis mit Lipschitz-stetigen Funktionen. **50** #4844

Katz, Robert *See* **Grossman, Michael**, **55** #3180

Kisīl′, R. I. *See* **Īvanel, V. K.; et al.**, **58** #28334

Kraśnicka, Barbara (*with* Malec, Marian) On the order of linear dependence of real functions. **50** #554

Lindstad, O. Series expansion with the help of antidifferentiation. (Norwegian. English summary) **55** #5808

Lleras, Francisco On a geometric property of the polynomial function of degree n.

(Spanish) 51 #821

van de Lune, Jan A note on the fundamental theorem for Riemann-integrals. 51 #13148

Maassen, A. Monotonicity, continuity and antidifferentiability in comparison with integrability. (Dutch) **56** #5806

Maksimiv, Ē. M. *See* **Ĭvanel, V. K.; et al., 58** #28334

Malec, Marian w-dépendance et dépendance générale au sens de Marczewski. **51** #822

See also **Kraśnicka, Barbara, 50** #554

Malešević, Jovan V. Alternate versions of the proofs of some theorems of classical analysis. (Serbo-Croatian. Russian summary) **50** #10165

A certain generalization of Taylor's formula. (Serbo-Croatian. Russian summary) **52** #14184

Manickam, S. (*with* Agrawal, J. C.) Delta-sequences and an intermediate value theorem. **48** #8697

Mikeladze, Š. E. On the estimation of the remainder term of the expansion of a piecewise continuous function with piecewise continuous derivatives. (Russian. Georgian and English summaries) **53** #3218

Mitin, V. N. Certain theorems on the determination of the global maximum. (Russian) **48** #6326

Miu, I. M. Contributions sur les zéros réels de certains fonctions. (English, Russian and German summaries) **48** #4213

Mohanty, R. (*with* Ray, Brajakishore) On the evaluation of some definite integrals. **46** #5534

Ostrowski, Alexander M. Note on the Bernoulli-l'Hospital rule. **53** #729

Patel, A. B. Leibnitz's theorem. **58** #1049

Prodanov, Ivan A remark on the fundamental theorem of integral calculus. (Bulgarian) **58** #28335

Ray, Brajakishore *See* **Mohanty, R., 46** #5534

Reuter, Dietrich Mittelwertsatz der Differentialrechnung und Extremwertprobleme. **55** #3181

Rizzitelli, Giuseppe Considerazioni sulla regola di de l'Hospital. (English and French summaries) **54** #10518

Rodriguez Cano, José Juan General form of the remainder in Taylor's series. (Spanish) **50** #555

Savić, Branko A new procedure for determining the coefficients of a Taylor series. (Serbo-Croatian. English summary) **58** #16999

Singh, Radhey S. On conditions for Taylor expansion with integral form of the remainder. **56** #8763

Zenkin, O. V. A method of determining functions by an analytic expression. (Russian) **58** #28336

Studies in the theory of functions of several real variables ★Исследования по теории функций многих вещественных переменных. (Russian) [Studies in the theory of functions of several real variables] **58** #16998

Theory of functions *See* **Studies in the theory of functions of several real variables, 58** #16998

Secondary classifications:

Battioni, Giacomino I tre teoremi, del Calcolo alle differenze finite, analoghi ai teoremi di Rolle, di Cauchy, di Cavalieri-Lagrange. (English summary) (**47** #661)

Gel'fond, M. G. The relation between the classical and constructive versions of the construction of mathematical analysis. (Russian. English summary) (**49** #8827)

Lightstone, A. H. Infinitesimals. (**46** #49)

Minoli, Daniel Asymptotic form for generalized factorial. (Spanish summary) (**58** #27853)

Schramm, Ruben Quasilinearity properties of differentiable functions in a field with a non-Archimedean valuation. (**50** #12995)

Schreiber, Alfred Zur algebraischen Analyse der Kettenregel. (**58** #10853)

Tinhofer, Gottfried Über eine Anwendung der Lagrangeschen Reihe. (**50** #6881)

26A09 Elementary functions

Andersen, Christian A remark on the differential equation $d^ny/dx^n = \ln x$. (Danish. English summary) **48** #2315

Belocerkovskiĭ, B. M. *See* **Belocerkovskiĭ, I. M., 50** #556

Belocerkovskiĭ, I. M. (*with* Belocerkovskiĭ, B. M.) On the construction of a smooth first order continuation. (Russian) **50** #556

Berţi, Ştefan N. Some relations between interval functions. I. **49** #10827

Bohan, K. A. (*with* Laščenov, K. V.) The analytic definition of certain elementary functions. (Russian) **55** #10612

Brown, Jack B. Almost continuity of the Cesàro-Vietoris function. **50** #13390

Buckholtz, James D. Geometric approximations for e. **49** #5242

Carlitz, Leonard (*with* Scoville, Richard) Tangent numbers and operators. **46** #1968

Klamkin, Murray S. On some multiple integrals. **54** #2892

Konikowska, B. Absolutely computable sets. (Russian summary) **50** #10166

Laščenov, K. V. *See* **Bohan, K. A., 55** #10612

Leach, E. B. (*with* Sholander, M. C.) Extended mean values. **58** #22428

Martić, Branislav Some inequalities connected with exponential function. **52** #8348

Mullikin, Harry C. Subgroups of the reals and periodic functions. **54** #481

Näslund, Reinhold A definition of the logarithm function. (Swedish. English summary) **52** #5895

Scoville, Richard *See* **Carlitz, Leonard, 46** #1968

Sholander, M. C. *See* **Leach, E. B., 58** #22428

Zulauf, A. How $x!$ should be differentiated. **52** #3441

Secondary classifications:

Haruki, Hiroshi A famous definite integral. (**53** #8700)

Joshi, S. R. (*with* Shendge, G. R.) A note on hyperbolic functions. (**55** #12961)

McKie, William An example of a skewing function. (**58** #8472)

McLaughlin, James R. The Denjoy-Luzin theorem on trigonometric series. (**48** #4620)

Ramachandra, K. V. Extension of de Moivre's theorem. (**58** #12682)

See also **Ramesan, T.,** (**58** #12681)

Ramesan, T. (*with* Ramachandra, K. V.) 4-D simplex functions. (**58** #12681)

Rvačov, V. O. Representation of exponential functions by functions of compact (Ukrainian. English and Russian summaries) (**49** #7499)

Shendge, G. R. *See* **Joshi, S. R.,** (**55** #12961)

26A12 Rate of growth of functions, orders of infinity, slowly inc functions [See also 26A48.]

Aljančić, Slobodan (*with* Aranđelović, D.) 0-regularly varying functions. **57** #6

Aranđelović, D. Fonctions à comportement régulier et convergence uniforme. **54** #10519

See also **Aljančić, Slobodan, 57** #6317

Ash, J. Marshall (*with* Erdős, Paul; Rubel, Lee A.) Very slowly varying fu **48** #8698

See also **Heppner, Ernst, 54** #7710

Bingham, N. H. (*with* Teugels, Jozef L.) Duality for regularly varying functions. **52** #5896

Bloom, Steven A characterization of B-slowly varying functions. **52** #14185

Bojanic, Ranko (*with* Seneta, Eugene) A unified theory of regularly varying seq **48** #11407

Cyganok, Ī. Ī. Some properties of a class of N-functions. (Russian) **58** #28337

Erdős, Paul *See* **Ash, J. Marshall; et al., 48** #8698 *and* **Heppner, Ernst, 54** #77

Galambos, János (*with* Seneta, Eugene) Regularly varying sequences. **48** #2316

de Haan, Laurens On functions derived from regularly varying functions. **58** #1

Hardy, Godfrey Harold ★Orders of infinity. The *Infinitärcalcül* of Paul du Bois-Reymond. **50** #2415

Heiberg, Charles H. A proof of a conjecture by Karamata. **46** #3700

Functions with asymptotically infinite differences. **46** #3701

Heppner, Ernst Über ein Problem von J. M. Ash, P. Erdős und L. A. Rubel: slowly varying functions" (Aequationes Math. **8** (1972), 191–192). **54** #7710

John, Fritz Functions whose gradients are bounded by the reciprocal of the dista the boundary of the domain of definition. (Russian) **53** #8340

Keller, Arnold Bounds for the sum of an infinite power series. (Spanish) **49** #739

Lense, Josef Vertauschbarkeit von Basis und Exponenten und iterierte Potenzen. **46** #3702

Maller, R. A. A note on Karamata's generalised regular variation. **57** #12799

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Smallwood, Catherine V. Approximate upper and lower limits. **45** #2103

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Wong, James S. W. A note on subadditive functions. **48** #6327

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Cicogna, G. Examples of functor adjunctions in elementary analysis. (**58** #11058)

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de Haan, Laurens Equivalence classes of regularly varying functions. (**51** #1916)

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Marić, Vojislav (*with* Tomić, Miodrag) Regular variation and asymptotic propert solutions of nonlinear differential equations. (**58** #22774)

Rishishwar, C. L. On the logarithmic ψ-type and logarithmic lower ψ-type functions represented by the series $\sum_{n=1}^{\infty} a_n \cdot e^{\lambda_n \cdot \psi(x)}$. (**46** #5617)

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Hoffman, Michael J. Continuity of inverse functions. **50** #13392

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Orevkov, V. P. The equivalence of two definitions of continuity. (Russian. English summary) **45** #3644 (E **48** ÷5808)

Oskolkov, K. I. (*with* Teljakovskiĭ, S. A.) On the estimates of P. L. Ul'janov for integral moduli of continuity. (Russian. Armenian and English summaries) **45** #8782

The uniform modulus of continuity of summable functions on sets of positive measure. (Russian) **57** #9917

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Samuels, P. Maximum Hausdorff dimension of certain exceptional sets. **47** #5186

Schwarz, Gideon On time-free functions. **45** #2105

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Sheingorn, Mark E. *See* **Bumcrot, Robert J., 48** #8700

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Vrabie, Ioan I. Some properties of continuous real functions defined on everywhere dense sets. **53** #5814
Wenner, B. R. Continuous, exactly k-to-one functions on **R**. **48** #472
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Zajíček, Luděk *See* **Lukeš, Jaroslav**, **56** #15851

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Berger, Arno (*with* Elster, Karl-Heinz) Untersuchungen über halbstetige Punkt-Menge-Abbildungen. (**55** #11200)
Besov, O. V. Inequalities for the moduli of continuity of functions given on a domain. (Russian) (**52** #8902)
Blass, Andreas Determinateness and continuity. (**58** #5211)
Bolstein, Richard Sets of points of discontinuity. (**47** #1014)
Breckenridge, J. C. (*with* Nishiura, Togo) Partial continuity, quasicontinuity, and Baire spaces. (**58** #24174)
Ceder, Jack On Darboux selections. (**54** #6076)
Cicogna, G. Examples of functor adjunctions in elementary analysis. (**58** #11058)
Cleveland, Richard A global characterization of uniform continuity. (**47** #4199)
Daurés, Jean-Pierre Sur l'absolue continuité des multi-applications. (**58** #30608)
Demuth, Osvald The representability of uniformly continuous constructive functions. (Russian) (**49** #2302)
Elster, Karl-Heinz *See* **Berger, Arno**, (**55** #11200)
Freud, Géza An approximation theoretical study of the structure of real functions. (**55** #13141)
Fujito, Isami On a relation of C to C^1. (**58** #28347)
Garsia, Adriano M. Combinatorial inequalities and smoothness of functions. (**58** #28362)
A remarkable inequality and the uniform convergence of Fourier series. (**54** #1364)
Gibson, Richard G. A local characterization of Darboux $\mathcal{B}$ functions. (**51** #4141)
Homutenko, L. G. Estimates of the norms of functions in the integral metric of L_p. (Russian) (**56** #6227)
Kaljabin, G. A. Estimates for functions with a finite O. V. Besov seminorm. (Russian) (**53** #1250)
Korczak, Jadwiga On some estimates of the integral moduli of continuity for functions of two variables in the space L_2. (Polish summary) (**52** #8783)
Korovkin, P. P. A generalization of N. N. Luzin's theorem. (Russian) (**54** #10523)
Nishiura, Togo *See* **Breckenridge, J. C.**, (**58** #24174)
Ram, Babu On integral modulus of continuity of functions defined by trigonometric series. (**54** #835)
Scherer, K. Stetigkeitsmoduli und beste Approximation durch polynomiale Splines. (**54** #8094)
Sedleckiĭ, A. M. Mean periodic extension of continuous functions with preservation of smoothness. (Russian) (**48** #6807)
Ševčuk, I. A. Some remarks on functions whose modulus of continuity is of order $k > 2$. (Russian) (**58** #29520)
Smith, Bruce D. An alternate characterization of continuity. (**47** #4202)
Ulewicz, Barthłomiej Sur les conditions pour les points doubles attractifs. (**58** #1799)
Weil, Clifford E. A topological lemma and applications to real functions. (**47** #5189)

26A16 Lipschitz (Hölder) classes

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Garsia, Adriano M. (*with* Rodemich, Eugene R.) Monotonicity of certain functionals under rearrangement. (French summary) **54** #2894
Lotkowski, Edward P. (*with* Wheeden, Richard L.) The equivalence of various Lipschitz conditions on the weighted mean oscillation of a function. **55** #583
Mustăţa, Costică A classification of Lipschitzian functions. (Romanian. French summary) **52** #670
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Zahradník, Miloš On the common fixed point for commuting Lipschitz functions. **45** #477

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Aleksjuk, V. N. (*with* Arekšin, G. Ja.) Compact families of set-functions. (Russian) (**58** #28389)
Arekškin, G. Ja. *See* **Aleksjuk, V. N.**, (**58** #28389)
Bell, Wayne C. A note on the subdivision norm infimum function. (Italian summary) (**58** #11298)
Berndt, V. Continuation of Lipschitzian mappings (the question of uniqueness). (Russian) (**56** #3636)
Bruneau, Michel Approximation sur le tore et irrégularité des fonctions. (**57** #12415)
Cobzaş, Ştefan (*with* Muntean, Ioan) Continuous and locally Lipschitz convex functions. (**57** #7170)
Ditzian, Zeev Inverse theorems for functions in L_p and other spaces. (**52** #14765)

Gaĭmnazarov, G. Generalization of a theorem of Hardy and Littlewood on the embedding of Lipschitz classes. (Russian) (**46** #7881)
Kaufman, Robert P. Sets of multiplicity and differentiable functions. II. (**52** #115
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26A18 Iteration [See also 39A20.]

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Bailey, D. F. Krasnoselski's theorem on the real line. **51** #5860
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Kuczma, Marek A contribution to the theory of fractional iteration of differential functions. (**50** #811)
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26A21 Classification of real functions; Baire classification of sets a functions [See also 04A15, 28A05, 54C50.]

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26A42 Integrals of Riemann, Stieltjes and Lebesgue type [See also 28–XX.]

Appling, William D. L. A mapping theorem for logarithmic and integration-by-parts operators. **56** #5813
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Goffman, Casper A note on integration. **45** #6990

Gołąb, Stanisław (*with* Tamássy, Lajos) Über ein Integral. **50** #4856

Gregory, Michael B. (*with* Metzger, James J.) Functions Riemann-Stieltjes integrable against themselves. **53** #10997

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  Sklar-Stieltjes integrals. **45** #2113

Hašimova, M. K. An inversion formula. (Russian) **58** #28354

Hayes, Stanley E. (*with* Mauldin, R. Daniel) On the Stieltjes integrability of dense subsets of $C[a, b]$. **47** #6961

Helton, Burrell W. A special integral and a Gronwall inequality. **53** #10998

Henstock, Ralph Integration by parts. **47** #3608

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Hönig, Chaim Samuel ★The abstract Riemann-Stieltjes integral and its applications to linear differential equation with generalized boundary conditions. **57** #554

Jones, W. R. (*with* Landau, M. D.) One-sided limits and integrability. **45** #6991

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  A generalization of N. N. Luzin's theorem. (Russian) **54** #10523
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Levine, Leo M. On a necessary and sufficient condition for Riemann integrability. **55** #10616

Love, Eric Russell Addendum to: "Changing the order of integration". **47** #2014

Luxemburg, Wilhelmus Anthonius Josephus Arzelà's dominated convergence theorem for the Riemann integral. **45** #6992

Macaev, V. I. (*with* Solomjak, M. Z.) Existence conditions for the Stieltjes integral. (Russian) **58** #22437

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Metzler, Richard C. On Riemann integrability. **45** #8786

Ney, Andrei Constructive representations for positive functions that are simply summable [non-summable] or improperly integrable [non-integrable]. (Romanian. French summary) **52** #5901

Ney, Paul Un schéma unitaire pour le traitement de divers opérateurs remarquables de l'analyse. **55** #589

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Petrovič, A. Ju. The convergence of subsequences of Riemann sums. (Russian) **52** #5902

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Rennie, B. C. Repeated Riemann integrals. **50** #4857

Richter, Wolf-Dieter Über eine Verallgemeinerung des Stieltjesschen Integralbegriffes für Funktionen mehrerer Veränderlicher. **55** #8276

Russell, A. M. Stieltjes-type integrals. **52** #14189

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Sarbadhikari, H. A note on some properties of A-functions. **53** #10996

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Schwabik, Štefan On the relation between Young's and Kurzweil's concept of Stieltjes integral. (Czech summary) **48** #477
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Šneider, A. A. The reduction of an improper double Lebesgue integral to an iterated integral. (Russian) **51** #828

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Ţevy, Ionel Une définition de l'intégrale de Lebesgue à l'aide des fonctions pri
51 #829

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Tucker, Don H. *See* **Easton, Richard J.**, (See Zbl **169**, 182)

Vaĭnerman, Ju. R. Sufficient conditions for the existence of the Stieltjes integral. (Russian. English summary) **49** #3058

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Webb, S. Michael (*with* Chapin, E. William, Jr.) A non-standard proof in the the
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Wright, Fred M. (*with* Baker, James D.; Klasi, Melvin L.) Substitution theorem
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Beer, Gerald A. A note on Riemann integrability. (**57** #6354)

Bondi, I. L. Representation of generalized functions by means of the A-integral. (Russian) (**46** #7887)

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Finkelstein, Mark (*with* Whitley, Robert) Integrals of continuous functions. (**54** #13018)

Goguadze, D. F. Double and iterated Kolmogorov integrals, and the generalizatio
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Hlybov, B. K. *See* **Strel′cova, V. M.,** (**58** #28401)

Hönig, Chaim Samuel The Dirichlet and substitution formulas for Riemann-Stie
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Huggins, Frank N. Bounded slope variation and generalized convexity. (**57** #6326)

Kaplan, Samuel Riemann and Lebesgue integrability. (**47** #7399)

Legg, David A. (*with* Ward, Joe) A generalized magic square. (**51** #13154)

McShane, E. J. A unified theory of integration. (**47** #6981)

Nemirovskiĭ, A. S. (*with* Očan, M. Ju.; Rejouani, R.) Conditions for Riemann integrability of functions with values in a Banach space. (Russian. English summ
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Pu, Hwang Wên Another proof that Riemann-complete integral includes the Lebe
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Puglisi, Mario A. Alcuni aspetti della teoria assiomatica dell'integrale di Riem
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Radoux, Christian Note sur le comportement asymptotique de l'indicateur d'E
(English summary) (**55** #12617)

Rejouani, R. On the question of the Riemann integrability of functions with values
Banach space. (Russian. English summary) (**45** #2134)
  On the question of strong and weak (R)-integrability of abstract functi
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Rennie, B. C. The Riemann integrability of $f'^2 + g'^2, f', g'$. (**56** #3206)

Ridder, J. Duale Konstruktionen von Riemann- wie von Lebesgue-Integralen nicht-negativer Funktionen in abstrakten Räumen. I. (**49** #7415)
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Russell, A. M. Applications of Riemann-Stieltjes integrals of order k in functi
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Shisha, Oved *See* **Osgood, Charles F.,** (**54** #6467)

Stevens, Robert R. On a uniqueness problem in the theory of linear integral equati
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Strel′cova, V. M. (*with* Hlybov, B. K.) The indefinite p_1-integral. (Russian) (**58** #28

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Wüst, Rainer Beweis eines Lemmas von Ganelius. (**58** #28377)

26A45 Functions of bounded variation, generalizations

Achour, Abdennebi Sur la variation réductible d'une fonction de **R**. (English summ
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Albrycht, Jerzy (*with* Musielak, Julian) On a class of functions with finite general
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Baiada, Emilio Variazione e lunghezza negli spazi di Banach-Vitali. (English summ
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Berman, D. L. A certain interpolational criterion for the continuity of a peri
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Bhakta, P. C. On functions of bounded variation relative to a set. **46** #9250

Bojanov, Borislav D.. The relationship between the variation of a function and modulus of nonmonotonicity. (Bulgarian. Russian and English summaries) **54** #10524

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Wayment, Stanley G. On the BV-norm closure of vector-valued polygonal functions. **47** #8790
Wilczyński, Władysław The set of points of absolute continuity of a differentiable function of two variables. (Polish. English summary) **49** #7401
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Boni, Mauro (*with* Brandi, Primo) Teoremi d'esistenza per l'integrale del calcolo delle variazioni nel caso ordinario. (**52** #11710)
    (*with* Brandi, Primo) Varizione, classica e generalizzata, con peso. (**52** #11711)
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Bruneau, Michel Mesures positives sur la droite réelle; mesures de Carathéodory et variation totale d'une fonction. (**46** #1990)
Čanturija, Z. A. The moduli of variation of a function and its applications in the theory of Fourier series. (Russian) (**49** #7682)
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Córdoba, Antonio Bounded variation and differentiability of functions. (**55** #10619)
Daniel, David (*with* Ellis, H. W.) On the set of limits of Riemann sums. (**53** #11012)
Demuth, Osvald (*with* Němečková, L.) The constructive analogue of the property (T_1). (Russian) (**53** #12898 (EA **54**))
    The differentiability of constructive functions of weakly bounded variation on pseudo numbers. (Russian) (**57** #16005)
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Kel'zon, A. A. Functions of bounded (m,p)-variation. (Russian. Georgian and English summaries) (**52** #8767)
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Sevast'janov, E. A. Piecewise monotone approximation, and Φ-variations. (Russian. English summary) (**52** #8747)
Sidorov, A. M. The symmetric continuity of functions of two variables. (Russian) (**57** #16507)
Terehin, A. P. Functions of bounded q-integral p-variation, and embedding theorems. (Russian) (**46** #2421)
Terracher, Pierre H. Fonctions à variation bornées, familles sommables, et applications à la nucléarité. (English summary) (**55** #6174)
Thornburg, James L. Convergent subsequences from sequences of functions. (**51** #8667)
Waterman, Daniel On convergence of Fourier series of functions of generalized bounded variation. (**46** #9623 (E **48** #6795))
    On functions of bounded deviation. (**50** #10661)
Zagirov, N. Š. Generalized variations of functions, and their applications in the theory of the approximation of functions. (Russian) (**58** #1880)

26A48 Monotonic functions, generalizations

Albrecht, Felix (*with* Diamond, Harold George) An extremal problem involving functions and their inverses. **46** #9251
Burkill, H. (*with* Mirsky, L.) Monotonicity. **49** #494
Diamond, Harold George *See* **Albrecht, Felix**, **46** #9251
Donath, Gerhard (*with* Elster, Karl-Heinz) Über Eigenschaften unimodaler Funktionen. **48** #4221
    (*with* Elster, Karl-Heinz) Über eine Verallgemeinerung unimodaler Funktionen. (Bulgarian and English summaries) **54** #2899
    (*with* Elster, Karl-Heinz) Generalized unimodal functions. **56** #8767
Drasin, David (*with* Shea, Daniel F.) Pólya peaks and the oscillation of positive functions. **45** #3650
Elster, Karl-Heinz *See* **Donath, Gerhard**, **48** #4221; **Donath, Gerhard**, **54** #2899 *and* **Donath, Gerhard**, **56** #8767
Findley, David F. The inverse (s) of a non-decreasing function. **52** #5904
Hsu, Ih Ching On a converse of Young's inequality. **45** #476
Kimberling, Clark H. Two-dimensional complete monotonicity with diagonalization. **48** #8708

Kuusalo, Tapani On the Beurling-Ahlfors functional inequality. **52** #14192
Lacković, Ivan B. On N-function and its derivative. **50** #13401
Lee, Peng Yee A constructive proof of a differential inequality. **49** #5258
Mastalerz-Wawrzyńczak, Maria On a certain condition of the monotonicity of functions. **56** #12196
Mel′ničenko, M. M. The behavior on the boundary of monotone mappings of the class $BL^{n/2}$. (Ukrainian. English and Russian summaries) **46** #5548
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Nishiura, Togo (*with* Schnitzer, Franz) Moments of convex and monotone functions. **46** #5547
O'Malley, Richard J. A density property and applications. **50** #13402
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Pu, Hwang Wên (*with* Pu, Huo Hui Min) Sufficient conditions for non-decreasing functions. **50** #10178
A monotonicity criterion for arbitrary functions. **51** #830
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Serafin, Stanisław On peakless functions. **50** #2420
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Smallwood, Catherine V. Monotonic restrictions. **49** #493
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Wobst, Reinhard Stetige reelle Funktionen, die in keinem Punkt monoton sind. **54** #13002

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Bagijan, R. A. *See* **Džrbašjan, M. M.**, (**55** #673)
Bruckner, Andrew M. (*with* Garg, K. M.) The level structure of a residual set of continuous functions. (**57** #16487)
Cohen, Leon W. On differentiation. (**55** #3183)
Džrbašjan, M. M. (*with* Saakjan, B. A.) Classes of formulas and expansions of Taylor-Maclaurin type associated with differential operators of fractional order. (Russian) (**51** #8347)
(*with* Bagijan, R. A.) Integral representations and measures that are associated with functions of Mittag-Leffler type. (Russian. Armenian and English summaries) (**55** #673)
Evans, Michael J. Monotonicity and the L_p symmetric derivative. (**54** #5406)
Garg, K. M. Characterizations of absolutely continuous and singular functions. (**55** #588)
See also **Bruckner, Andrew M.**, (**57** #16487)
Higgins, James J. Representing a finite Borel measure in terms of its distribution function. (**47** #5206)
Matijasevič, Ju. V. A sufficient condition for the convergence of monotone sequences. (Russian. English summary) (**45** #62 (E **48** #5808))
Mišík, Ladislav Sätze des Khintchine Typus für Mengenfunktionen. (Russian and loose English summaries) (**56** #8781)
Saakjan, B. A. *See* **Džrbašjan, M. M.**, (**51** #8347)
Simonov, A. A. A study of piecewise monotone transformations of an interval by the methods of symbolic dynamics. (Russian) (**58** #12968)
Smajdor, Andrzej On some special iteration groups. (**49** #11081)
Vasudeva, Harkrishan On monotone matrix functions of two variables. (**47** #2408)

26A51 Convexity, generalizations

Avriel, Mordecai r-convex functions. **46** #309
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Bector, C. R. On convexity, pseudo-convexity and quasi-convexity of composite functions. **53** #735
Ben-Israel, Adi *See* **Ben-Tal, Aharon**, **58** #11276
Ben-Tal, Aharon (*with* Ben-Israel, Adi) A generalization of convex functions via support properties. **58** #11276
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Burnside, Robert R. Convexity and Jensen's inequality. **52** #10974
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Clarke, Frank H. Generalized gradients and applications. **51** #3373
Cornish, A. G. Measurable semi-p-functions. **47** #5185
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Cox, James C. A theorem on additively-separable, quasi-concave functions. **56** #5814
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Elster, Karl-Heinz (*with* Erdmann, Ditmar) Über das Konvexitätsverhalten ho Funktionen vom Grade 1. **48** #479
(*with* Erdmann, Ditmar) Kriterien für das Konvexitätsverhalten positiv homogener Funktionen vom Grade 1. **50** #2421
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Gurzău, Mircea Octavian The convexity of interval-functons. **58** #6111
Gwinner, Joachim Mean value theorem for convex functionals. **56** #553
Hartman, Philip Convex functions and mean value inequalities. **48** #11415
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Khang, Chulsoon "Some properties of concave functions" (J. Econom. Theory **1** (291–314 (1970)) by Peter Newman: a comment. **57** #9924
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Mititelu, Ştefan Fonctions convexes généralisées. **54** #5410
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Nehse, Reinhard Bemerkungen zu einem Ergebnis von J. Zowe (Math. Scand. **31** (19 301–309 (1973)). (English and Russian summaries) **53** #3825
Newman, Peter Some properties of concave functions. **53** #736
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Novickiĭ, M. V. Completely convex functions. (Russian) **49** #7402
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Perlman, Michael D. *See* **Eaton, Morris L.**, **56** #3211
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Ribarič, Marjan *See* **Lah, P.**, **48** #4225
Roberts, A. Wayne (*with* Varberg, Dale E.) Another proof that convex functions locally Lipschitz. **50** #4858
Robinson, Stephen M. Regularity and stability for convex multivalued functions. **55** #3188 (E **57** #12801)
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Smítal, Jaroslav On convex functions bounded below. **55** #3189
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(*with* Mijajlović, Živojin) On an index set function connected with Jensen inequality. **56** #3213

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gge, Leon L. Mean value theorem for convex functions. (See Zbl **292** #90043)

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See also **Nehse, Reinhard**, **53** #3825

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nstantine, Randolph, Jr. Variation norm convergence of function sequences. (**50** #5294)

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rland, Jacques A. Maximal domains of quasi-convexity and pseudo-convexity for quadratic functions. (**47** #1834)

ancŭ, Jan On decompositions into anticonvex sets. (**58** #21650)

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nsberg, William Concavity and quasiconcavity in economics. (**56** #10805)

oldberg, Kenneth P. A new definition for quasisymmetric functions. (**50** #2488)

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eenberg, Harvey J. (*with* Pierskalla, William P.) Quasi-conjugate functions and surrogate duality. (**51** #2649)

u, Ih Ching (*with* Kuller, Robert G.) Convexity of vector-valued functions. (**54** #11059)

A functional inequality and its relation to convexity of vector-valued functions. (**54** #3356)

uggins, Frank N. Bounded slope variation and generalized convexity. (**57** #6326)

hansen, Søren The extremal convex functions. (**49** #11242)

iries, Hans-Heinrich Convexity in the theory of the gamma function. (**58** #6379)

rlin, Samuel (*with* Ziegler, Zvi) Some applications to inequalities of the method of generalized convexity. (**55** #11152)

emperman, J. H. B. The dual of the cone of all convex functions on a vector space. (**53** #8860)

nd, Bernd Höhere Ableitungen konvexer Funktionen. (**53** #14120)

ngman, J. F. C. ★Regenerative phenomena. (**50** #3353)

On the Chapman-Kolmogorov equation. (**51** #7007)

ylov, N. V. Some properties of the normal representation of convex functions. (Russian) (**58** #2243)

uczma, Marek On a theorem of Roman Ger: "On an alternative functional equation" (Aequationes Math. **15** (1977), no. 2-3, 145–162) by R. Ger. (**54** #8448)

uller, Robert G. *See* **Hsu, Ih Ching**, (**54** #11059)

** acković, Ivan B.** (*with* Stanković, Miomir S.) On Hadamard's integral inequality for convex functions. (**50** #2427)

See also **Vasić, Petar M.**, (**51** #13166 (E **55** #10626))

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opes Pinto, António Jorge Brandão Functions with values in an ordered topological linear space. A closed-graph theorem for convex functions. (Italian summary) (**47** #768)

upaş, Alexandru An integral inequality for convex functions. (**48** #8718)

aergoĭz, L. S. A certain boundary value problem for convex functions and its application to the study of the asymptotic behavior of functions. (Russian) (**45** #5878)

Marcellini, Paolo Un teorema di passaggio al limite per la somma di funzioni convesse. (English summary) (**52** #9031)

Marti, Jürg T. ★Konvexe Analysis. (**58** #23497)

Nevius, S. E. (*with* Proschan, Frank; Sethuraman, Jayaram) A stochastic version of weak majorization with applications. (**56** #1596)

(*with* Proschan, Frank; Sethuraman, Jayaram) Schur functions in statistics. II. Stochastic majorization. (**56** #1595)

Orbán, Gheorghe *See* **Breckner, Wolfgang W.**, (**58** #30607)

Pellong, C. *See* **Bilgezadeh, A.**, (**55** #3589)

Pethe, S. P. (*with* Sharma, Ambikeshwar) Modified Abel expansion and a subclass of completely convex functions. (**48** #2622)

Pierskalla, William P. *See* **Greenberg, Harvey J.**, (**51** #2649)

Pitt, Loren D. A Gaussian correlation inequality for symmetric convex sets. (**56** #7010)

Prékopa, András New proof for the basic theorem of logconcave measures. (Hungarian. English summary) (**58** #1071)

Proschan, Frank Applications of majorization and Schur functions in reliability and life testing. (**56** #7082)

(*with* Sethuraman, Jayaram) Schur functions in statistics. I. The preservation theorem. (**56** #1594)

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Ribarič, Marjan On some inequalities for convex functions. (**52** #5915)

Rinott, Yosef On convexity of measures. (**55** #1561)

Rubinšteĭn, G. Š. A characterization of the saturation of a class of convex functions. (Russian) (**51** #8849)

Sethuraman, Jayaram *See* **Proschan, Frank**, (**56** #1594); **Nevius, S. E.; et al.**, (**56** #1595) *and* **Nevius, S. E.; et al.**, (**56** #1596)

Sharma, Ambikeshwar *See* **Pethe, S. P.**, (**48** #2622)

Shisha, Oved (*with* Travis, S.) L_p convergence of generalized convex functions and their uniform convergence. (**52** #14209)

Smajdor, Andrzej Note on the existence of convex iteration groups. (**51** #8664)

Spătaru, Aurel Note on Kingman semigroup $\mathcal{P}$. (**50** #11465)

Stanković, Miomir S. *See* **Lacković, Ivan B.**, (**50** #2427)

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Vasić, Petar M. On an inequality for convex functions. (**48** #8722)

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Vasil′ev, B. A. The asymptotic behavior of exponential integrals, the Newton diagram and the classification of minima. (Russian) (**58** #16649)

Vladimirov, Ju. N. A characterization of continuous strictly increasing functions. (Russian) (**57** #555)

Weil, Clifford E. Monotonicity, convexity and symmetric derivates. (**53** #5817)

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26A54 Several variables: continuity and differentiation questions

Andrew, Alan L. (*with* Morris, Sidney A.; Protomastro, Gerard P.; Stacey, P. J.) On mixed partial derivatives. **57** #3335

Andriambololona, Raoelina Les opérateurs différentiels en système orthogonal de coordonnées curvilignes. (English summary) **51** #10548

Asplund, Edgar Differentiability of the metric projection in finite-dimensional Euclidean space. **46** #9252

Babiĭ, A. N. Limit relations for a point of global extremum. (Russian) **51** #13157

Badea, Ion On a certain mean value theorem for complex functions of two real variables. (Romanian. French summary) **50** #7444

Bagby, Thomas (*with* Ziemer, William P.) Pointwise differentiability and absolute continuity. **49** #9129

Baiada, Emilio (*with* Tripiciano, Giulia) Sull'invertibilità dei limiti ripetuti di funzioni di due variabili. II. **45** #2116

(*with* Tripiciano, Giulia) Sull'invertibilità dei limiti ripetuti di funzioni di due variabili. III. **46** #7455

Bălan, Trandafir (*with* Predoi, Maria) A topological study of the bidimensional derivative. **57** #16506

Beer, Gerald A. Continuity properties of the visibility function. **49** #5260

Belna, Charles L. Cluster sets of arbitrary real functions: a partial survey. **57** #556

Bongiorno, Benedetto Sulla differenziabilità delle funzioni *B*-misurabili. (English summary) **49** #9130

Sulla differenziabilità quasi ovunque delle funzioni di più variabili. (French summary) **49** #496

(*with* Vetro, Pasquale) Funzioni a gradiente integrabile. (English summary) **55** #3190

Borgogno, Maria Sopra le funzioni di più variabili assolutamente continue. **45** #3643

Ancora sopra le funzioni di più variabili assolutamente continue. **45** #8789

Bos, Werner Axiomatische Charakterisierung des arithmetischen Mittels. **55** #5819

Burenkov, V. I. Sobolev's integral representation and Taylor's formula. (Russian) **50** #10179

Carrese, Rosalba Sulla differenziabilità delle funzioni a valori in uno spazio di Banach. **58** #28361

Colvin, Sam (*with* Debnath, Lokenath) On symmetric partial derivatives and symmetric differentiability. **48** #4227

Córdoba, Antonio Bounded variation and differentiability of functions. **55** #10619

Crouzeix, Jean-Pierre A relationship between the second derivatives of a convex function and of its conjugate. **57** #3336

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Di Bari, Cristina Maria Su alcune condizioni di differenziabilità per le funzioni di più variabili. **54** #7719

Eidswick, J. A. A topological translation of a fundamental problem in cluster set theory. **51** #13158

Fadell, Albert G. A generalization of Rademacher's theorem on complete differential. **48** #8709

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A note on a theorem of Gehring and Lehto. **51** #3374

Flett, Thomas Muirhead Mean value theorems for vector-valued functions. **48** #11417

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Goffman, Casper On the continuity of functions in W_p^1 which are monotonic in one direction. **48** #6340

González, Mario O. A spherical representation of the real directional derivative. **53** #13492

Gopengauz, I. E. Difference properties and differentiability of functions of several variables. (Russian) **53** #8351

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Humke, Paul D. Samely ambiguous points of arbitrary planar sets and functions. **49** #5261

Il′in, V. P. A certain integral representation of functions. (Russian. English summary) **51** #5865

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Klopfenstein, Kenneth F. (*with* Telste, John) Visualizing uniform continuity of functions of several variables. **49** #5262

Kohn, Robert V. An example concerning approximate differentiation. **55** #590

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Kružkov, S. N. On the question of the differentiability almost everywhere of functions of several variables. (Russian. English summary) **55** #12884

Liu, Fon Che On a theorem of Whitney. **47** #8793

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Mčedlišvili, S. A. The existence of an exact differential of a function of two variables. (Georgian. Russian and English summaries) **55** #591

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Pu, Hwang Wên Uniform and nonuniform differentiability. **46** #7456

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Reas, Pier Giorgio Sulla regolarità di un integrale rispetto ad un parameto. **57** #3337

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Rudin, Walter Restrictions on the values of derivatives. **58** #1057

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Asymptotically differentiable functions of several variables. (Russian) **53** #10999

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Vetro, Pasquale Sulla differenziabilità-parziale delle funzioni di più variabili. (F summary) **50** #10180 (EA **51**)

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Vul′fson, A. E. The continuity of functions with two variables. (Russian) **58** #283

Waksman, Z. (*with* Wasilewsky, J.) A theorem on level lines of continuous funct **56** #3214

Warga, Jack Derivative containers, inverse functions, and controllability. **55** #592

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Calderón, Calixto P. Differentiation through starlike sets in $\mathbf{R}^m$. (**48** #8732)

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Fempl, Stanimir Über eine Klassifikation der nichtanalytischen Funktionen. (**46** #7525)

Hoffmann, K.-H. (*with* Kolumbán, Iosif) Verallgemeinerte Differenzierbarkeitsbegriff und ihre Anwendung in der Optimierungstheorie. (English summary) (**56** #13034)

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Stein, Elias M. ★Сингулярные интегралы и дифференциальные свойства функци (Russian) [Singular integral and differential properties of functions] (**50** #1061)

26A57 Several variables: implicit function theorems, Jacobians, transformations with several variables

Bal, Lascu (*with* Mihoc, Maria) Sur la condition de Goursat de séparation des variabl aux équations à quatre variables. **49** #10833

Butler, Geoffrey (*with* Freedman, H. I.) Further critical cases of the scalar implic function theorem. **47** #3611

Chenais, Denise Homéomorphismes entre ouverts voisins uniformément lipschitzien (English summary) **54** #13004

Clarke, Frank H. On the inverse function theorem. **54** #13005

Coen, Salvatore Una caratterizzazione dei dominii convessi di $\mathbf{R}^n$ a frontiera differenziabile. (English summary) **45** #6996

Craven, B. D. On differentiable functions. **54** #2900

Desoer, Charles A. *See* **Wu, Felix F.**, **48** #8712

Díaz, Joaquin B. An elementary calculus exposition of the Lagrange multiplier rul **52** #14195

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Gevirtz, Julian A sharp condition for univalence in Euclidean spaces. **53** #8352

Halkin, Hubert Brouwer fixed point theorem versus contraction mapping theorem optimal control theory. **54** #10525

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Karon, John M. (*with* Ralston, James V.) Double integrals as initial value problem **55** #8277

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Lahiri, B. K. A theorem on implicit functions. **45** #3654

On transformations of sets in E_n. **50** #13404

Liverani, Francesco Proposizioni costruttive d'esplicitazione: esistenza e unicità. **57** #3338

Magaril-Il′jaev, G. G. The implicit function theorem for Lipschitzian mappings. (Russian) **58** #11277

McShane, E. J. The Langrange multiplier rule. **48** #481

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Miu, I. M. Contributions concernant les zéros de systèmes de fonctions. (Russia English and German summaries) **45** #478

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arga, Jack Derivative containers, inverse functions, and controllability. (**55** #592)

26A60 Calculus of vector functions

hn, Fritz Bounds for deformations in terms of average strains. **49** #9131
acRae, Elizabeth Chase Matrix derivatives with an application to an adaptive linear decision problem. **52** #5906
kanishi, Shizu Integration of functions with values in a convex ranked space. **58** #11278
Calleja, Pedro The theorem of finite increments for vector functions of a real or complex variable. (Spanish) **50** #562
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iaz, Joaquin B. (*with* Výborný, R.) Generalized mean value theorems of the differential calculus. (**52** #8932)
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26A63 Integration: length, area, volume

pert, Louis I. (*with* Toralballa, L. V.) An elementary definition of surface area in E^{n+1} for smooth surfaces. **46** #5551
arbieri, Francesco (*with* Zanelli, Vanna) Variazioni ed area come norme di funzionali lineari. **46** #7457
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anders, Harley Differentiation under the integral sign. **49** #5266
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reenberg, Marvin Jay Element of area via exterior algebra. **52** #14196
Hermann, Peter Die Berechnung des Raumwinkels durch Bestimmung eines Vektorpotentials. **56** #3215
Jack, Henry A generalization of an early multivariate integral. **47** #6966
Nekvinda, Miloslav Curves of maximal length. (Czech. German summary) **50** #4859
Nitsche, Johannes C. C. The smallest sphere containing a rectifiable curve. **45** #480
Perevalov, G. E. A certain criterion for the rectifiability of a continuum in the space $\mathbf{R}^n$. (Russian) **49** #7404
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Serafin, Stanisław The rectifiability of curves by tangents. (Polish. English and Russian summaries) **46** #5552
Talât-Erben, M. Evaluation of the integral $I(n, a, b) = \int_0^\infty r^n e^{-ar} \mathrm{Ei}(br)\, dr$. (Turkish summary) **58** #1058
Taylor, Walter Note on defining arc length. **49** #7405
Toralballa, L. V. *See* **Alpert, Louis I.**, **46** #5551
Vaĭnberg, A. M. The hyperarea of the level surfaces of functions of several variables. (Russian) **45** #5290
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Domiaty, R. Z. Eine Verallgemeinerung des Begriffs der Bogenlänge in metrischen Räumen. (**46** #5587)
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Henstock, Ralph Integration by parts. (**47** #3608)
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Meĭlanov, V. S. Two nearby sets of bounded variation. (Russian) (**54** #2926)
Nishiura, Togo *See* **Breckenridge, J. C.**, (**45** #8807)
Novikova, N. S. $(C, -\mu, -\nu)$-integrability of functions of two variables. (Russian) (**58** #28356)
Price, Martin E. Area of Bernstein-type polynomials. (**48** #4580)
Ščerbin, V. M. Some questions on integration in K-spaces with identity. (Russian) (See RŽMat **1974** #4 B830; MR **57** #9376)
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Treiber, Dietmar Über Differentialgleichungen in n. a. Banachräumen, insbesondere ihre Lösung mittels eines "Wegintegrales". (**51** #6080)

26A66 Integral formulas (Stokes, Gauss, Green, etc.)

Fedele, Nicola Ancora su una formula di Green. (English summary) **49** #9132
Sulla formula di Green nel piano per funzioni non limitate. **48** #8713
Gorlenko, S. V. A converse of the Green-Stokes theorem. (Russian) **50** #4860 (EA **51**)
Hermann, Peter Über den Satz von Stokes. **48** #4231
Král, Josef An example toward the inversion of Green's theorem. (Czech) **56** #3216
Morev, I. A. The integral representation of monogeneous functions of several variable. (Russian) **48** #482 (EA **49**)
Mugalov, A. G. Tests for repeated integrability in domains with curvilinear contours. (Russian. Azerbaijani and English summaries) **54** #486
The curvilinear integral in the sense of Cesàro-Denjoy. (Russian. Azerbaijani and English summaries) **55** #5820
Pacquement, Antoine Sur certaines applications de la formule de Green. (English summary) **52** #679
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Smith, James R. On direct proofs of Green's identities for the general linear second order operator. **47** #3614

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Auer, J. W. Stokes' theorem for smooth bundles. (**54** #11371)
Meller, N. Differential forms and the formulas of vector analysis. (Russian) (**57** #10719)

26A69 Special properties of functions of several variables, Hölder conditions, etc.

Adamski, Andrzej On the representability of functions in the form of a sum, product, and a product of sums. **54** #487
Beesack, Paul R. Equivalent L_p-norms of subadditive functions. **56** #3217
Cahill, Rotraut Goubau On bounded functions satisfying averaging conditions. II. **54** #10526
Cushing, Jim M. Extremal tests for scalar functions of several real variables at degenerate critical points. **52** #3450
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Geman, Donald Local times for vector functions: energy integrals and local growth rates. **56** #554
Ger, Roman Thin sets and convex functions. (Russian summary) **48** #4232
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Golubov, B. I. An analogue of a theorem of Wiener. (Russian. Georgian and English summaries) **50** #2422
Henkin, G. M. Estimates of the Hölder index of a mapping that increases dimension. (Russian) **56** #12197

Jurkin, G. I. The plane variation of A. S. Kronrod and the Tonelli variation of a function $Z=\omega(x,y)$ of two variables. (Russian. Georgian and English summaries) **47** #3615

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Kominek, Zygfryd Some generalization of the theorem of S. Piccard. **48** #4233

Král, Josef Functions satisfying an integral Lipschitz condition. **47** #6967

Leksiński, Wacław (*with* Żakowski, Wojciech) On some classes of non-bounded functions. **47** #3616

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Shisha, Oved (*with* Verma, G. R.) On Lipschitz condition and Zygmund's property for functions of several variables. **58** #17007

Stanford, A. N. Functions satisfying a mean value property at their zeros. **47** #3617

Tolstonogov, A. A. The properties of the maximum function with constraints. (Russian) **46** #310

Verma, G. R. *See* **Shisha, Oved, 58** #17007

Wilczyński, Władysław Absolute continuity of functions of two variables and the theorem of Burenkoff. (Italian summary) **56** #555

Żakowski, Wojciech *See* **Leksiński, Wacław, 47** #3616

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Bruckner, Gottfried Über lokale Hölder-Stetigkeit und lokale gleichmässige Monotonie von Superpositionsabbildungen zwischen Lebesgueschen Räumen. (**58** #17998)

Drábek, Pavel Continuity of Němyckij's operator in Hölder spaces. (**52** #1447)

Hunter, D. B. The positive-definiteness of the complete symmetric functions of even order. (**56** #8378)

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Losonczi, László A generalization of the Gronwall-Bellman lemma and its applications. (**49** #3611)

Weil, Clifford E. A topological lemma and applications to real functions. (**47** #5189)

26A70 Set-valued functions of one or several variables

Ahrens, Ingrid Über Folgen und Reihen von Punktmengen. **46** #3719

26A72 Superposition of functions

Agračev, A. A. Superpositions of continuous functions. (Russian) **51** #10550

Andrews, J. J. (*with* Lacher, R. C.) Stacked exponents. **57** #6331

Boehme, Thomas K. The convolution integral. (See Zbl **179**, 169)

Buck, R. Creighton Approximate functional complexity. **52** #8356

Demko, Stephen A superposition theorem for bounded continuous functions. **56** #15856

Doss, Raouf A superposition theorem for unbounded continuous functions. **58** #28366

Fast, H. On separating capacity of polynomials in a class of cartesian products. **47** #6968

Fridman, B. L. Nowhere denseness of the space of linear superpositions of functions of several variables. (Russian) **47** #6969

On a theorem on the representation of continuous functions by linear superpositions. (Russian) **58** #22438

Kahane, Jean-Pierre Sur le théorème de superposition de Kolmogorov. **51** #8351

Kaufman, Robert P. Linear superposition of smooth functions. **50** #4861

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Lorentz, Georg Gunther The 13th problem of Hilbert. **58** #22439

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Some properties of a class of composite functions. (Bulgarian. Russian and French summaries) **58** #28368

Ramankutty, P. (*with* Vamanamurthy, M. K.) Limit of the composite of two functions. **50** #4862

Šapurovas, A. B. The periodicity of a composite function. (Russian. Lithuanian and English summaries) **45** #486

Šopolov, Nikolaĭ *See* **Manolov, Spas, 58** #28367

Sprecher, David A. An improvement in the superposition theorem of Kolmogorov. **46** #1981

Sternfeld, J. Dimension theory and superpositions of continuous functions. **51** #10551

Tihomirov, V. M. A comment on A. N. Kolmogorov's theorem on the superposition of functions. (Russian) **56** #556

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Vituškin, A. G. On representation of functions by means of superpositions and related topics. **58** #17008

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Wilczyński, Władysław Superpositions of transformations of bounded variation. **54** #7721

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Buck, R. Creighton Approximate functional complexity. (**55** #10920)

Demuth, Osvald A necessary and sufficient condition for the representability of constructive functions in the form of a superposition of absolutely continuous functions. (Russian) (**47** #3146)

The connection between the representability of a constructive function in the form of a superposition of two absolutely continuous functions and the differentiability of this function. (Russian) (**50** #70)

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Doss, Raouf Représentation des fonctions continues de deux variables réelles. (**54** #13469)

Representations of continuous functions of several variables. (**54** #13470)

Foran, James Continuous functions—a survey. (**58** #22429)

(Hilbert, David) *See* **Zajíček, Luděk,** (**58** #4929)

Korovkin, P. P. The integrability of composite functions. (Russian) (**49** #5253)

Sprecher, David A. A survey of solved and unsolved problems on superpositions functions. (**50** #845)

Zajíček, Luděk The thirteenth Hilbert problem. (Czech) (**58** #4929)

26A75 Polynomials (analytic properties, inequalities, etc.)

Babkin, B. N. Positive polynomials. (Russian) **45** #5291

Boas, Ralph P., Jr. (*with* Klamkin, Murray S.) Extrema of polynomials. **56** #5815

Buslaev, V. I. Certain inequalities for polynomials with real coefficients. (Russia **53** #8353

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Videnskiĭ, V. S. On Turán's inequality. (Russian) **58** #28379

Volkov, V. N. A multi-dimensional analogue of the Steffensen inequality. (Russian) **57** #6337

An inequality for sourcewise representable functions. (Russian) **57** #6338

An inequality that contains the Young inequality. (Russian) **57** #6339

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Westermann, L. R. J. Geometric aspects of linear inequalities. (Dutch) (Not reviewed)

The Pythagorean theorem in norm inequalities. (Dutch) (Not reviewed)

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Zenkin, O. V. The analytic description of geometric shapes. (Russian. English summary insert) **45** #7003

Ziemer, William P. *See* **Meyers, Norman G.**, **58** #22443

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Beckenbach, Edwin F. Convexity, Hardy's theorem, and the lemma of Schwarz. (**48** #11484)

Beesack, Paul R. On bounds for the range of ordered variates. (**48** #5257)

Friedberg, R. *See* **Luttinger, J. M.**, (**53** #8451)

Griffeath, David The maximal oscillation problem for regenerative phenomena. (**50** #5944)

Hayden, T. L. *See* **Williams, Lynn R.; et al.**, (**46** #9711)

Kečkić, Jovan D. (*with* Stanković, Miomir S.) Some inequalities for special functions. (**48** #6479)

Leindler, László On a generalization of Bernoulli's inequality. (**47** #7003)

Luttinger, J. M. (*with* Friedberg, R.) Some functional inequalities, with application to Green's function. (**53** #8451)

Milovanović, Gradimir V. Some functional inequalities. (Serbo-Croatian. English summary) (**58** #1795)

Mitrović, Žarko M. On a generalisation of Fan-Todd's inequality. (**48** #3994)

Mjasnikov, V. P. *See* **Mosolov, P. P.**, (**45** #5744)

Mosolov, P. P. (*with* Mjasnikov, V. P.) A proof of Korn's inequality. (Russian) (**45** #5744)

Ōno, Shunzō On a treatment of the symbol $\geqslant$. (Japanese. English summary) (**45** #6703)

Pachpatte, B. G. A note on some new discrete inequalities. (**58** #1783)

Rinott, Yosef Multivariate majorization and rearrangement inequalities with some applications to probability and statistics. (**51** #4549)

Rozenfel'd, E. A. Generalized Young and Hardy-Littlewood inequalities, and their application in imbedding theorems. (Russian) (**54** #921)

Stanković, Miomir S. *See* **Kečkić, Jovan D.**, (**48** #6479)

Wells, James H. *See* **Williams, Lynn R.; et al.**, (**46** #9711)

Williams, Lynn R. (*with* Wells, James H.; Hayden, T. L.) On the extension of Lipschitz-Hölder maps on L^p spaces. (**46** #9711)

26A90 Real-analytic functions

Boas, Ralph P., Jr. Signs of derivatives and analytic behavior. **45** #5297

Cattabriga, Lamberto *See* **De Giorgi, Ennio**, **45** #7004

De Giorgi, Ennio (*with* Cattabriga, Lamberto) Una formula di rappresentazione per funzioni analitiche in R^n. (English summary) **45** #7004

Kaneko, Akira A new characterization of real analytic functions. **46** #9731

McHugh, J. A. M. A proof of Bernstein's theorem on regularly monotonic functions. **50** #7451

Souček, Jiří (*with* Souček, Vladimír) Morse-Sard theorem for real-analytic functions. **46** #7459

(*with* Souček, Vladimír) The Morse-Sard theorem for real-analytic functions. **52** #14204

Souček, Vladimír *See* **Souček, Jiří**, **46** #7459 *and* **Souček, Jiří**, **52** #14204

Stepanova, T. V. The zeros of quasiholomorphic functions. (Russian. English summary) **49** #5280

Zanghirati, Luisa Complementi per una formula di rappresentazione per funzioni analitiche in un cono aperto di $\mathbf{R}^n$. (English summary) **58** #28380

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Tougeron, Jean-Claude Solutions d'un système d'équations analytiques réelles et applications. (English summary) (**55** #5888)

Weispfenning, Volker Two model theoretic proofs of Rückert's Nullstellensatz. (**51** #5296)

26A93 C^∞-functions, quasi-analytic functions

Bartczak, Teresa The Cauchy singular points of a function of several variables. (Polish. English summary) **48** #11428

Čaus, M. M. A generalization of a certain theorem on the quasi-analyticity of a function. (Russian) **51** #8356

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Ducateau, C. F. Interpolation par des fonctions de $\mathcal{C}^k[a,b]$. **51** #3377
Eidswick, J. A. Examples of non-bimeasurable C^∞-functions. **47** #6971
Ganzburg, M. I. Inequalities for entire functions of finite degree in symmetric spaces. (Russian) **58** #28381
Geĭsberg, S. P. Asymptotic behavior of quasianalytic functions. (Russian) **54** #2903
Glaeser, Georges Prolongement extrémal de fonctions différentiables d'une variable. **50** #566
González de Buitrago Díaz, Gonzalo A note on the mean value theorem for a certain class of functions. (Spanish) **56** #15861
Hryptun, V. G. An addition to a theorem of S. Mandelbrojt. (Russian) **55** #12887
Hughes, R. B. Erratum: "Zero sets of functions from non-quasi-analytic classes". **47** #3624
Kazdan, Jerry L. Quasi-analytic functions. (See Zbl **179**, 144)
Kitbaljan, A. A. The problem of α-quasianalyticity in Denjoy-Carleman classes. (Russian. Armenian and English summaries) **52** #8364
Kočarjan, G. S. A uniqueness theorem for functions of several variables. (Russian. Armenian summary) **58** #11290
Konjuhovskiĭ, V. S. Distribution of the roots of quasianalytic functions. (Russian) **51** #836
Litvin, O. M. (*with* Rvačov, V. L.) Expansion of H-realizable functions in the neighborhood of a piece-wise smooth line. (Ukrainian. English and Russian summaries) **46** #5554
Mandelbrojt, Szolem Détermination effective d'une fonction à partir d'une suite partielle de ses dérivées en un point. (English summary) **52** #5918
Relations entre différentes classes de fonctions indéfiniment dérivables. (English summary) **55** #12888
Détermination effective d'une fonction appartenant à une classe quasi analytique généralisée à partir d'une suite partielle de ses dérivées en un point. **58** #17014
Měska, Jiří Expressing $f\in\mathfrak{V}$ as a difference of two positive functions $f_1, f_2\in\mathfrak{V}$. (Czech and loose Russian summaries) **58** #11291
Monna, A. F. Classes quasi-analytiques. **46** #9260 (E **48** #2331)
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Nagel, Alexander Factorization of flat functions. **47** #422
Ovakimjan, A. S. The expandability of functions in quasipower series for a sequence of complex numbers $\{\gamma_\nu\}$. (Russian. Armenian summary) **57** #564
Pelling, M. J. A problem about Taylor's theorem. **52** #14206 (E **55** #10650)
Pham-Gia, Thu Density of non quasi-analytic classes of functions. **58** #6123
Rvačov, V. L. (*with* Rvačov, V. O.) A certain finite function. (Ukrainian. English and Russian summaries) **45** #5298
See also **Litvin, O. M.**, **46** #5554
Rvačov, V. O. Certain functions with compact support, and their applications. (Russian) **48** #8725
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Saakjan, B. A. Differential operators of fractional order, and their associated $\langle\rho_j\rangle$-absolutely monotone functions. (Russian. Armenian and English summaries) **51** #3378
Schoenberg, Isaac Jacob Norm inequalities for a certain class of C^∞ functions. **45** #3661
Sharma, Ambikeshwar (*with* Tzimbalario, Jean) Classes of functions defined by differential inequalities. **57** #3340
Trimèche, Khélifa Convergence des séries de Taylor généralisées au sens de Delsarte. **52** #8365
Tzimbalario, Jean *See* **Sharma, Ambikeshwar**, **57** #3340
Videnskiĭ, V. S. A remark on the representation of an infinitely differentiable function by a sum of two quasianalytic functions. (Russian) **58** #1064
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Walczak, Paweł A proof of some theorem on the C^∞-functions of one variable which are not analytic. **49** #504

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Barbançon, Gérard Théorème de Newton pour les fonctions de class C^r. (**49** #8051)
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Belov, A. S. Quasianalyticity of the sum of a lacunary series. (Russian) (**53** #8769)
Bochnak, Jacek (*with* Łojasiewicz, Stanisław) A converse of the Kuiper-Kuo theorem. (**45** #1059)
(*with* Kuo, Tzee-Char) Rigid and finitely V-determined germs of C^∞-mappings. (**49** #4020)
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Chang, Shih Hung (*with* Lu, Yung Chen) On C^0-sufficiency of complex jets. (**49** #8052)
Chernoff, Paul R. Quasi-analytic vectors and quasi-analytic functions. (**58** #30432)
Christensen, Jens Peter Reus A topological analogue of the Fubini theorem and some applications. (**52** #6685)
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Goetgheluck, Pierre Caractérisation de sous-espaces de fonctions C^∞ dans certains espaces L^2 avec poids. (**48** #4708)
Kuo, Tzee-Char *See* **Bochnak, Jacek**, (**49** #4020)
Lassalle, M. G. Une démonstration du théorème de division pour les fonctions différentiables. (**47** #1077)
Levy-Bruhl, Pierre Un théorème de division pour les fonctions de Gevrey. (En summary) (**54** #8704)
Ljubič, Ju. I. (*with* Tkačenko, V. A.) The abstract quasianalyticity problem. (Russ (**50** #5512)
Łojasiewicz, Stanisław *See* **Bochnak, Jacek**, (**45** #1059)
Lu, Yung Chen *See* **Chang, Shih Hung**, (**49** #8052)
Mandelbrojt, Szolem Relations entre la convexité dans le complexe et le prolongem des propriétés dans le réel. (English summary) (**49** #580)
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Merrien, Jean Idéaux de l'anneau des séries formelles à coefficients réels et vari associées. (**47** #7768)
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Pleśniak, Wiesław Some decompositions of functional spaces by means of quasi-analy functions of several variables. (Russian summary) (**47** #3880)
Poénaru, Valentin ★Analyse différentielle. (**50** #5844)
Reddy, A. R. *See* **Meinardus, Günter; et al.**, (**46** #9603 (E **48** #4581))
Robinson, Abraham On the real closure of a Hardy field. (**49** #4980)
Seeley, Robert T. Addendum to: "Extension of C^∞ functions defined in a half space (**46** #9716)
Shiota, Masahiro Differentiable functions equivalent to analytic functions. (**49** #627
Taylor, Gerald D. *See* **Meinardus, Günter; et al.**, (**46** #9603 (E **48** #4581))
Tkačenko, V. A. *See* **Ljubič, Ju. I.**, (**50** #5512)
Tognoli, Alberto Un teorema di approssimazione relativo. (English summary) (**50** #10311)
Tougeron, Jean-Claude ★Idéaux de fonctions différentiables. (**55** #13472)
Varga, Richard S. *See* **Meinardus, Günter; et al.**, (**46** #9603 (E **48** #4581))
Zapata, Guido I. Weighted approximation, Mergelyan's theorem and quasi-analyti classes. (**52** #11413)
Zobin, N. M. Extension and representation theorems for Gevrey type spaces. (Russian (**51** #3880)

26A96 Calculus of functions on infinite-dimensional spaces

Fraenkel, L. E. Formulae for high derivatives of composite functions. **58** #6124
Restrepo, Guillermo A proof of the inverse function theorem. **47** #423

Secondary classifications:

(Berg, Lothar) *See* **Bögel, Karl; et al.**, (**58** #17835)
Biswas, Nanigopal Derivative and continuity in a linear topological space. (Italia summary) (**45** #2470)
Bögel, Karl (*with* Tasche, Manfred) ★Analysis in normierten Räumen. (**58** #17835)
Burenkov, V. I. The formula for the differentiation of functions of operators that deper on a parameter. (Russian) (**58** #23600)
(Fenyő, István) *See* **Bögel, Karl; et al.**, (**58** #17835)
Focke, Joachim Beschränkt konvexe Funktionen und die Lipschitz-Stetigkeit ihres Gradienten. (English and Russian summaries) (**57** #17430)
Goodman, Victor A divergence theorem for Hilbert space. (**45** #7469)
Guerreiro, Claudia S. Ideals of differentiable functions. (Portuguese. English summar (**58** #31174)
Lebourg, Gérard Valeur moyenne pour gradient généralisé. (English summary) (**52** #8934)
Leduc, Michel Fonctions dérivables. (**45** #893)
Muratori, Paolo Sulla differenziabilità secondo Gâteaux di inviluppi superiori di funzioni negli spazi di Banach. (English summary) (**45** #7470)
Sulla differenziabilità secondo Fréchet di inviluppi superiori di funzioni ne spazi di Banach. (English summary) (**45** #9132)
Nazarov, I. N. The connection between amorphous and nodal segment-functiona (Russian. Uzbek summary) (**45** #4169)
Rivaud, J. J. A remark on a converse of Taylor's theorem. (**58** #7685)
Simonnet, Michel Sur le théorème de Frobenius. (**47** #5588)
Tasche, Manfred *See* **Bögel, Karl**, (**58** #17835)

26A97 Non-Archimedean analysis

Istrăţescu, Vasile I. Introduction to nonarchimedian analysis. (Romanian) **46** #3728
Laugwitz, Detlef Ein Weg zur Nonstandard-Analysis. **58** #1065

Secondary classifications:

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Motzkin, Elhanan Le point de vue complexiforme. (**51** #938)
Müller, Helmut Bemerkungen zur Approximation stetiger Funktionen in einer p-adischen Variablen. I. (**51** #10250)

26A98 Nonstandard analysis [See also 02H25.]

Ahmad, Shair (*with* Yaaseen, Adel A. K.) On convergence in the ultra-real spa (Arabic summary) **54** #7724
Giorello, Giulio Strutture non-standard della teoria dei numeri reali. I, II. (See Zbl #02020)
Grząślewicz, Andrzej (*with* Grzybacz, Karol; Moszner, Zenon) Remarks on a cert

neralization of analysis. (Polish. German and Russian summaries) 46 #9261
acz, Karol *See* **Grząślewicz, Andrzej; et al.,** 46 #9261
. N. A non-standard treatment of some aspects of two variables function theory. #8776
, Hilbert Non-standard analysis: an exposition. 51 #837
mburg, Wilhelmus Anthonius Josephus) *See* **Contributions to nonstandard analysis,** 7 #16517
ner, Zenon *See* **Grząślewicz, Andrzej; et al.,** 46 #9261
r, Michael M. Über die unendlich kleinen Grossen in der Analysis. 53 #8361
nson, Abraham) *See* **Contributions to nonstandard analysis,** 57 #16517
en, Adel A. K. *See* **Ahmad, Shair,** 54 #7724
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andard analysis *See* **Contributions to nonstandard analysis,** 57 #16517

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djanskiĭ, B. M. Outline of the basic concepts of nonstandard analysis. (Russian) 58 #10426)
iski, Marek Ultraproducts of higher-order models and non-standard analysis. 56 #116)
, Jörg Nonstandard analysis. (Spanish) (57 #12211)
d, Albert) *See* **Symposium: Victoria, Nonstandard Analysis,** (57 #12159)
en, Anton A computer oriented version of "non-standard analysis". (58 #5192)
kov, Vadim (*with* Waid, Carter) Asymptotic behavior of non-linear inhomogeneous quations via non-standard analysis. I. Second order equations. (48 #4412)
tstone, A. H. Infinitesimals. (46 #49)
Infinitesimals and integration. (47 #4790)
(*with* Robinson, Abraham) ★Nonarchimedean fields and asymptotic xpansions. (54 #2457)
, Peter A. A combinatorial analog of Lyapunov's theorem for infinitesimally enerated atomic vector measures. (47 #5221)
Applications of nonstandard analysis to ideal boundaries in potential theory. (56 #15961)
See also **Symposium: Victoria, Nonstandard Analysis,** (57 #12159)
emburg, Wilhelmus Anthonius Josephus ★Non-standard analysis. (58 #10428)
Nichtstandard-Zahlsysteme und die Begründung des Leibnizschen Infinitesimalkalküls. (58 #10430)
Non-standard analysis. (57 #12212)
See also **Stroyan, K. D.,** (58 #10429)
on, Edward Internal set theory: a new approach to nonstandard analysis. (57 #9544)
inson, Abraham Function theory on some nonarchimedean fields. (48 #8464)
See also **Lightstone, A. H.,** (54 #2457)
dig, Anna-Margarete Lokale Werte und Grenzwerte von Predistributionen. (53 #3691)
Über die Regularisierung und Ordnung von Predistributionen. (53 #3692)
yan, K. D. (*with* Luxemburg, Wilhelmus Anthonius Josephus) ★Introduction to the theory of infinitesimals. (58 #10429)
Infinitesimal calculus on locally convex spaces. I. Fundamentals. (58 #12351)
euchi, Yu Representation of nonstandard numbers by means of Hermitian operators. (Spanish. English summary) (58 #21588)
d, Carter *See* **Komkov, Vadim,** (48 #4412)
kler, Regine Über mögliche Erweiterungen der Analysis und ihre praktische Bedeutung. (55 #5439)
niak, Czesław On the non-standard formulation of mechanics. (Polish and Russian summaries) (57 #8278)
standard analysis *See* **Symposium: Victoria, Nonstandard Analysis,** (57 #12159)
standard methods ★Nonstandard methods. (Japanese) (58 #28333)
posium:
Nonstandard Methods *See* **Nonstandard methods,** (58 #28333)
Victoria, Nonstandard Analysis ★Victoria Symposium on Nonstandard Analysis. (57 #12159)

6A99 Miscellaneous topics

bon, Marc ★Variabilité locale constructive. (Not reviewed)
z, Moshe Optimization of functionals containing functions and their inverses. 57 #6340

X MEASURE AND INTEGRATION [For analysis on manifolds, see 58–XX.]

Secondary classifications:

hmer, Siegfried) *See* **Riesz, Frigyes; et al.,** (49 #9570)
tes de Sousa, Maria de Fátima On conditional probabilities and σ-finite measures. (Portuguese) (49 #9889)
i, Brigitte) *See* **Riesz, Frigyes; et al.,** (49 #9570)
z, Frigyes (*with* Sz.-Nagy, Béla) ★Vorlesungen über Funktionalanalysis. (49 #9570)
kawa, Iekata Ergodic properties of β-expansions. (Japanese) (58 #27876)
Nagy, Béla *See* **Riesz, Frigyes,** (49 #9570)

8–01 Elementary exposition (collegiate level)

ov, G. P. (*with* Makarov, B. M.; Havin, V. P.) ★Элементарное введение в теорию интеграла. (Russian) [Elementary introduction to the theory of the integral] (See RŽMat **1970** #5 V142K)
nčić, Slobodan Area, volume and measure in general. I. (Serbo-Croatian) 58 #11292a
Area, volume and measure in general. II. (Serbo-Croatian) 58 #11292b
Anger, Bernd (*with* Bauer, Heinz) ★Mehrdimensionale Integration. 58 #1066
Ash, Robert B. ★Real analysis and probability. 55 #8280
★Measure, integration, and functional analysis. 55 #8281
Bauer, Heinz *See* **Anger, Bernd,** 58 #1066
Bellach, Joachim (*with* Franken, Peter; Warmuth, Elke; Warmuth, Walter) ★Mass, Integral und bedingter Erwartungswert. 58 #11293
Brehmer, Siegfried ★Einführung in die Masstheorie. 56 #8777
Burrill, Claude W. ★Measure, integration, and probability. 56 #15862
Claesson, Tomas (*with* Hörmander, L.) ★Integrationsteori. (Swedish) [Integration theory] 50 #7452
De Munter, P. Théorie moderne de l'intégration. 52 #14207
Descombes, Roger ★Intégration. 55 #12890
De Wilde, Marc *See* **Garnir, Henry G.; et al.,** 56 #562
(Dubuc, Serge) *See* **Jean, Roger,** 57 #6341
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taing, Charles (*with* Clauzure, Paulette) Représentation intégrale et décomposition de formes sous-linéaires continues sur un espace vectoriel normé décomposable de fonctions vectorielles mesurables. (English summary) (**58** #23593)

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Flachsmeyer, Jürgen (*with* Terpe, Frank) On summation on locally compact spaces. (**54** #10923)

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Costé, Alain Applications of the theory of cylindrical probabilities and radonifyin operators to the study of sublinear random functions. **53** #13506
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28A50 Integration and disintegration of measures [For lifting theory, see 46G15.]

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28A60 Measures on Boolean rings, measure algebras [See also 54H10.]

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Roventa, Eugen Fuzzy measures. (**58** #21629a)

Sequences of fuzzy sets. (**58** #21629b)

30–XX FUNCTIONS OF A COMPLEX VARIABLE [For analysis on manifolds, see 58–XX.]

Courant, Richard *See* **Hurwitz, Adolf, 50** #4902

(Evgrafov, M. A.) *See* **Hurwitz, Adolf; et al., 50** #4902

Hurwitz, Adolf (*with* Courant, Richard) ★Теория функций. (Russian) [Theory of functions] **50** #4902

Solomka, O. P. A theorem on the boundary properties of a certain class of functions that are analytic in a plane with a slit. (Russian) **45** #557

Secondary classifications:

Bank, Steven B. (*with* Kaufman, Robert P.) On meromorphic solutions of first-order differential equations. (**55** #3375)

Fuhrmann, Paul A. On Hankel operator ranges, meromorphic pseudo-continuations and factorization of operator-valued analytic functions. (**55** #1128)

Kaufman, Robert P. *See* **Bank, Steven B.**, (**55** #3375)

Reich, Axel Universelle Werteverteilung von Eulerprodukten. (**58** #27862)

Wachman, Murray A system of processes related by cause and effect. II. A generalized complex variable. (**53** #5034)

30–01 Elementary exposition (collegiate level)

Abian, Alexander Hurwitz' theorem implies Rouché's theorem. **57** #12823

Aleksandrov, I. A. (*with* Sobolev, V. V.) ★Лекции по теории функций комплексного переменного. Вып. 1. (Russian) [Lectures on the theory of functions of a complex variable. No. 1] **57** #12824

Amerio, Luigi ★Funzioni analitiche e trasformazione di Laplace. **50** #4903

Aramanovič, I. G. *See* **Volkovyskiĭ, L. I.; et al., 49** #9164; **Volkovyskiĭ, L. I.; et al., 50** #4911; **Volkovyskiĭ, L. I.; et al., 50** #4912 *and* **Volkovyskiĭ, L. I.; et al., 56** #3259

Bauer, Burkard Untersuchungen an einer Leibniz-Entdeckung. **54** #7759

Bežanov, K. A. *See* **Evgrafov, M. A.; et al., 51** #3406

Borisenko, B. N. (*with* Fesenko, V. G.) ★Аналитические функции и их приложение. Част′ II. (Russian) [Analytic functions and their application. Part II] **53** #8391

Brown, James Ward *See* **Churchill, Ruel V.; et al., 50** #580

(Buchner, Michael) *See* **Marsden, Jerrold Eldon, 50** #4906

Charris Castañeda, Jairo A. Foundations of the theory of functions of a complex variable. I, II. (Spanish) **52** #8384

Foundations of the theory of functions of a complex variable. III. (Spanish) **54** #2927

Foundations of the theory of functions of a complex variable. IV. (Spanish) **54** #2928

Foundations of the theory of functions of a complex variable. V. (Spanish) **54** #10574

Churchill, Ruel V. (*with* Brown, James Ward; Verhey, Roger F.) ★Complex variables and applications. **50** #580

Conway, John B. ★Functions of one complex variable. **56** #5843

Derrick, William R. ★Introductory complex analysis and applications. **53** #8392

Escané, J. M. ★Fonctions d'une variable complexe. **50** #4904

Evgrafov, M. A. (*with* Bežanov, K. A.; Sidorov, Ju. V.; Fedorjuk, M. V.; Šabunin, M. I.) ★Recueil de problèmes sur la théorie des fonctions analytiques. **51** #3406

Fedorjuk, M. V. *See* **Evgrafov, M. A.; et al., 51** #3406

Fesenko, V. G. *See* **Borisenko, B. N., 53** #8391

Feyel, Denis (*with* de la Pradelle, Armand) ★Exercices sur les fonctions analytiques. (Not reviewed)

Flanigan, Francis J. ★Complex variables: harmonic and analytic functions. **54** #10575

(Garavito, J.) *See* **Note on some entire transcendental functions, 53** #8394

Gel′fond, A. O. ★Residues and their applications. **50** #2449

Gray, J. D. (*with* Morris, Sidney A.) When is a function that satisfies the Cauchy-Riemann equations analytic? **57** #9940

Greenleaf, Frederick P. ★Introduction to complex variables. **56** #15888

Henrici, Peter Computational complex analysis. **50** #2450

(Hoffman, Michael) *See* **Marsden, Jerrold Eldon, 50** #4906

Hönig, Chaim Samuel ★Introdução às funções de uma variável complexa. (Portuguese) [Introduction to functions of one complex variable] **52** #14240

Jänich, Klaus ★Einführung in die Funktionentheorie. **57** #12825

Kečkić, Jovan D. *See* **Mitrinović, Dragoslav S., 50** #7488 *and* **Mitrinović, Dragoslav S., 57** #9941

Kirsanov, V. I. ★Элементы теории функций комплексного переменного и операционного исчисления. (Russian) [Elements of the theory of functions of a complex variable and of the operational calculus] **50** #4905

Knopp, Konrad ★Elemente der Funktionentheorie. **49** #9163

(Kopiecki, Ryszard) *See* **Šabat, B. V., 58** #28443b

Krzyż, Jan G. ★Problems in complex variable theory. **56** #5844

Kyrala, A. ★Applied functions of a complex variable. **53** #8393

Laitone, E. V. Relation of the conjugate harmonic functions to *f*(*z*). **55** #10646

Lang, Serge ★Complex analysis. **57** #16545

Latta, Gordon *See* **Pólya, George, 50** #7490

(Lindner, Krystyna) *See* **Šabat, B. V., 58** #28443b

Lipnjagov, F. E. *See* **Popov, M. T.; et al., 52** #3488

Lunc, G. L. *See* **Volkovyskiĭ, L. I.; et al., 49** #9164; **Volkovyskiĭ, L. I.; et al., 50** #4911; **Volkovyskiĭ, L. I.; et al., 50** #4912 *and* **Volkovyskiĭ, L. I.; et al., 56** #3259

Markuševič, A. I. ★Theory of functions of a complex variable. Vol. I, II, III. **56** #3258

(*with* Markuševič, L. A.) ★Введение в теорию аналитических функций. (Russian) [Introduction to the theory of analytic functions] **58** #17050

Markuševič, L. A. *See* **Markuševič, A. I., 58** #17050

Marsden, Jerrold Eldon ★Basic complex analysis. **50** #4906

McCullough, Thomas (*with* Phillips, Keith) ★Foundations of analysis in the complex plane. **50** #4907

Miller, Kenneth S. ★An introduction to advanced complex calculus. **49** #7424

Mitrinović, Dragoslav S. (*with* Kečkić, Jovan D.) ★Kompleksna analiza. (Serbo-Croatian) [Complex analysis] **50** #7488

★Kompleksna analiza. (Serbo-Croatian) [Complex analysis] **50** #7487

(*with* Kečkić, Jovan D.) ★Cauchyjev račun ostataka sa primenama. (Serbo-Croatian) [Cauchy's calculus of residues with applications] **57** #9941

Morris, Sidney A. *See* **Gray, J. D., 57** #9940

Paliouras, John D. ★Complex variables for scientists and engineers. **50** #7489

Pfeffer, Washek F. More on involutions of a circle. **51** #5898

Phillips, E. G. ★Functions of a complex variable, with applications. **50** #2451

Phillips, Keith *See* **McCullough, Thomas, 50** #4907

Pólya, George (*with* Latta, Gordon) ★Complex variables. **50** #7490

Popov, M. T. (*with* Zagibalov, V. I.; Lipnjagov, F. E.) ★Основы теории фун комплексного переменного. (Russian) [Principles of the theory of functions complex variable] **52** #3488

de la Pradelle, Armand *See* **Feyel, Denis**, (Not reviewed)

(Risk, Clifford) *See* **Marsden, Jerrold Eldon, 50** #4906

Rubel, Lee A. How to use Runge's theorem. **55** #3223 (E **57** #9942)

Errata: "How to use Runge's theorem" (Enseignement Math. (2) **22** (1976) 3-4, 185–190). **57** #9942

Rühs, Fritz ★Funktionentheorie. **58** #6179

Šabat, B. V. ★Введение в комплексный анализ. (Russian) [Introduction to com analysis] **58** #28443a

★Wstęp do analizy zespolonej. (Polish) [Introduction to complex analysis] **58** #28443b

★Введение в комплексный анализ. Часть I. Функции одного перемен (Russian) [Introduction to complex analysis. Part I. Functions of a single vari **58** #28443c

Šabunin, M. I. *See* **Evgrafov, M. A.; et al., 51** #3406

Šahno, K. U. ★Елементы теории функций комплексной переменной и операционного исчисления. (Russian) [Elements of the theory of functions complex variable and of operational calculus] **56** #15889

(Shiffer, Victor) *See* **Volkovyskiĭ, L. I.; et al., 50** #4912 *and* **Volkovyskiĭ, L. I.; e 56** #3259

Sidorov, Ju. V. *See* **Evgrafov, M. A.; et al., 51** #3406

Silverman, Herb ★Complex variables. **50** #10210

Silverman, Richard A. ★Complex analysis with applications. **50** #4908

See also **Markuševič, A. I., 56** #3258

Sobolev, V. V. *See* **Aleksandrov, I. A., 57** #12824

Srinivasan, V. K. A note on harmonic functions and harmonic conjugates. **56** #1

Svešnikov, A. G. (*with* Tihonov, A. N.) ★Теория функций комплексной перемен (Russian) [Theory of functions of a complex variable] **50** #2452

(*with* Tihonov, A. N.) ★Теория функций комплексной переменной. (Rus [Theory of functions of a complex variable] **50** #2453

(*with* Tihonov, A. N.) ★The theory of functions of a complex variable. **50** #2454

(*with* Tihonov, A. N.) ★The theory of functions of a complex variable. **50** #2455

(*with* Tihonov, A. N.) ★Теория функций комплексной переменной. (Rus [Theory of functions of a complex variable] **50** #4910

Takahashi, Alonso What is an analytic function? (Spanish) **51** #5899

Tihonov, A. N. *See* **Svešnikov, A. G., 50** #2452; **Svešnikov, A. G., 50** #2453; **Svešnikov, A. G., 50** #2454; **Svešnikov, A. G., 50** #2455 *and* **Svešnikov, A. G., 50** #4910

Tutschke, W. ★Grundlagen der Funktionentheorie. **50** #4909

Verhey, Roger F. *See* **Churchill, Ruel V.; et al., 50** #580

Volkovyskiĭ, L. I. (*with* Lunc, G. L.; Aramanovič, I. G.) ★Сборник задач по те функций комплексного переменного. (Russian) [A collection of problems o theory of functions of a complex variable] **50** #4911

(*with* Lunc, G. L.; Aramanovič, I. G.) ★Problems in the theory of functio a complex variable. **50** #4912

(*with* Lunc, G. L.; Aramanovič, I. G.) ★Aufgaben und Lösungen zur Funktionentheorie. I. **49** #9164

(*with* Lunc, G. L.; Aramanovič, I. G.) ★Problems in the theory of functio a complex variable. **56** #3259

(Volosov, V. M.) *See* **Gel′fond, A. O., 50** #2449

Walker, Peter L. ★An introduction to complex analysis. **50** #7491

Zagibalov, V. I. *See* **Popov, M. T.; et al., 52** #3488

Note on some entire transcendental functions Note: "On some entire transcen functions" (Spanish) (Anales de Ingeniería **24** (1916), 150–157) by J. Gar **53** #8394

Secondary classifications:

(Dhombres, N.) *See* **Rudin, Walter**, (**52** #10292)

Gjunter, N. M. (*with* Kuz′min, R. O.) ★Aufgabensammlung zur höheren Mather Band II. (**58** #26628)

(Hoffman, Frederick) *See* **Rudin, Walter**, (**52** #10292)

Kuz′min, R. O. *See* **Gjunter, N. M.**, (**58** #26628)

Malcolm, Wilfred G. Some structural features of the real and complex number sy and associated sub-systems. (**48** #469)

Markuševič, A. I. ★Curvas maravillosas. (Spanish) [Remarkable curves] (**57** #65

Pini, B. ★Primo corso di analisi matematica. (**50** #13387)

Pólya, George (*with* Szegő, Gábor) ★Задачи и теоремы из анализа. Часть пе (Russian) [Problems and theorems in analysis. Part one] (**58** #26630)

(Raĭkov, D. A.) *See* **Pólya, George; et al.**, (**58** #26630)

Rudin, Walter ★Real and complex analysis. (**49** #8783)

★Analyse réelle et complexe. (**52** #10292)

Šabat, B. V. ★Введение в комплексный анализ. Часть II. Функции неско переменных. (Russian) [Introduction to complex analysis. Part II. Functio several variables] (**58** #28443d)

vel′ev, L. Ja. ★Лекции по математическому анализу. (Russian) [Lectures on mathematical analysis] (52 #10295)

★Лекции по математическому анализу. (Russian) [Lectures on mathematical analysis] (52 #10296)

★Лекции по математическомы анализу. (Russian) [Lectures on mathematical analysis] (52 #10297)

nirnov, V. I. ★Lehrgang der höheren Mathematik. Teil III, 2. (55 #12382)

egő, Gábor *See* **Pólya, George**, (58 #26630)

ega, Carlos) *See* **Markuševič, A. I.**, (57 #6530)

30–02 Advanced exposition (research surveys, etc.)

lfors, Lars V. ★Conformal invariants: topics in geometric function theory. 50 #10211

eksandrov, I. A. ★Параметрические продолжения в теории однолистных функций. (Russian) [Parametric continuations in the theory of univalent functions] 58 #1099

derson, J. M. (*with* Barth, Karl F.; Brannan, D. A.) Research problems in complex analysis. 55 #12899

benko, K. I. ★The theory of extremal problems for univalent functions of class S. 58 #1100

rth, Karl F. *See* **Anderson, J. M.; et al.**, 55 #12899

cadze, A. V. ★Основы теории аналитических функций комплексного переменного. (Russian) [Foundations of the theory of analytic functions of a complex variable] 52 #11009

ilii, V. Ī.) *See* **Metric questions of the theory of functions and mappings**, 58 #28444

annan, D. A. *See* **Anderson, J. M.; et al.**, 55 #12899

iederich, Klas (*with* Remmert, Reinhold) ★Funktionentheorie. I. (See Zbl 223 #30001)

uren, Peter L. Coefficients of univalent functions. 57 #9943

ayman, W. K. Research problems in function theory: progress on the previous problems. 52 #8385

Research problems in function theory: new problems. 52 #8386

enrici, Peter ★Applied and computational complex analysis. 51 #8378

★Applied and computational complex analysis. Vol. 2. 56 #12235

bragimov, I. I.) *See* **Special questions in the theory of functions**, 57 #3357

ackey, George W. ★Lectures on the theory of functions of a complex variable. 55 #10647

alliavin, Paul Quelques applications pratiques de la théorie des fonctions holomorphes dans un domaine borné de C ou C^n. 54 #2929

arkuševič, A. I. ★Избранные главы теории аналитических функций. (Russian) [Selected chapters in the theory of analytic functions] 55 #8324

evanlinna, R. ★Eindeutige analytische Funktionen. 49 #9165

oonan, James W.) *See* **Babenko, K. I.**, 58 #1100

ommerenke, Christian) *See* **Problems in complex function theory**, 58 #1101

rivalov, I. I. ★Einführung in die Funktionentheorie. Teil III. 49 #7425

emmert, Reinhold *See* **Diederich, Klas**, (See Zbl 223 #30001)

aks, S. (*with* Zygmund, Antoni) ★Analytic functions. 50 #2456

cott, E. J.) *See* **Saks, S.; et al.**, 50 #2456

islian, Jean) *See* **Smirnov, V. I.**, 53 #3268

mirnov, V. I. ★Cours de mathématiques supérieures. Tome III. Deuxième partie. 53 #3268

uvorov, G. D.) *See* **Metric questions of the theory of functions and mappings**, 58 #28444

ammi, Olli ★Extremum problems for bounded univalent functions. 58 #11337

rohimčuk, Ju. Ju. On a generalization of Liouville's theorem. (Russian) 51 #10592

oung, L. C. On D. J. Patil's remarkable generalisation of Cauchy's formula. 52 #11010

alcman, Lawrence Real proofs of complex theorems (and vice versa). 48 #6370

ygmund, Antoni *See* **Saks, S.**, 50 #2456

omplex function theory *See* **Problems in complex function theory**, 58 #1101

lappings *See* **Metric questions of the theory of functions and mappings**, 58 #28444

letric questions of the theory of functions and mappings ★Метрические вопросы теории функций и отображений. Вып. 2. (Russian) [Metric questions of the theory of functions and mappings. No. 2] 45 #509

★Метрические вопросы теории функций и отображений. (Russian) [Metric questions of the theory of functions and mappings] 58 #28444

roblems in complex function theory Problems in complex function theory. 58 #1101

roceedings of the Steklov Institute of Mathematics *See* **Babenko, K. I.**, 58 #1100

pecial questions in the theory of functions ★Специальные вопросы теории функций. (Russian) [Special questions in the theory of functions] 57 #3357

heory of functions *See* **Special questions in the theory of functions**, 57 #3357 *and* **Metric questions of the theory of functions and mappings**, 58 #28444

Secondary classifications:

efferman, Charles L. Harmonic analysis and H^p spaces. (57 #989)

ayashi, Mikihiro On approximation by rational functions. (Japanese) (57 #17291)

ang, Serge ★Complex analysis. (57 #16545)

Nikol′skiĭ, N. K.) *See* **Investigations in linear operators and function theory**, (46 #7927)

amrazov, P. M. ★Гладкости и полиномиальные приближения. (Russian) [Smoothnesses and polynomial approximations] (58 #22576)

Wood, James S.) *See* **Investigations in linear operators and function theory**, (46 #7927)

unction theory *See* **Investigations in linear operators and function theory**, (46 #7927)

nvestigations in linear operators and function theory ★Investigations in linear operators and function theory, Part I. (46 #7927)

inear operators *See* **Investigations in linear operators and function theory**, (46 #7927)

eminars in Mathematics (V. A. Steklov Math. Inst., Leningrad) *See* **Investigations in linear operators and function theory**, (46 #7927)

30–03 Historical

Walsh, J. L. History of the Riemann mapping theorem. 48 #2348

Secondary classifications:

Ahlfors, Lars V. Das mathematische Schaffen Rolf Nevanlinnas. (58 #10150)

Aleksandrov, P. S. (*with* Bicadze, A. V.; Višik, M. I.; Oleĭnik, O. A.) Il′ja Nestorovič Vekua (on the occasion of his seventieth birthday). (Russian) (56 #8299)

Bicadze, A. V. *See* **Aleksandrov, P. S.; et al.**, (56 #8299)

(Boas, Ralph P., Jr.) *See* **Pólya, George**, (58 #21341) *and* **Pólya, George**, (58 #21342)

(Bogoljubov, O. M.) *See* **History of national mathematics in four volumes**, (58 #26682)

Čerskiĭ, Ju. I. *See* **Litvinčuk, G. S.; et al.**, (54 #33)

Dobrovol′s′kiĭ, V. O. From the history of the Riemann problem. (Russian) (58 #21254)

(Gahov, F. D.) *See* **Litvinčuk, G. S.; et al.**, (54 #33)

Gray, J. D. (*with* Morris, Sidney A.) When is a function that satisfies the Cauchy-Riemann equations analytic? (57 #9940)

Hvedelidze, B. V. *See* **Litvinčuk, G. S.; et al.**, (54 #33)

(Juškevič, A. P.) *See* **History of national mathematics in four volumes**, (58 #26682)

Kiro, S. M. I. V. Slešinskiĭ's papers in the theory of continued fractions. (Russian) (58 #27117)

Litvinčuk, G. S. (*with* Mihaĭlov, L. G.; Hvedelidze, B. V.; Čerskiĭ, Ju. I.) Fedor Dmitrievič Gahov (on the occasion of his seventieth birthday). (Russian) (54 #33)

Mihaĭlov, L. G. *See* **Litvinčuk, G. S.; et al.**, (54 #33)

Morris, Sidney A. *See* **Gray, J. D.**, (57 #9940)

Neuenschwander, Erwin Studies in the history of complex function theory. I. The Casorati-Weierstrass theorem. (German summary) (58 #10109)

(Nevanlinna, R.) *See* **Ahlfors, Lars V.**, (58 #10150)

Oleĭnik, O. A. *See* **Aleksandrov, P. S.; et al.**, (56 #8299)

Pólya, George ★Collected papers. (58 #21341)

★Collected papers. (58 #21342)

(Šlesinskiĭ, I. V.) *See* **Kiro, S. M.**, (58 #27117)

(Štokalo, Ĭ. Z.) *See* **History of national mathematics in four volumes**, (58 #26682)

(Vekua, I. N.) *See* **Aleksandrov, P. S.; et al.**, (56 #8299)

Višik, M. I. *See* **Aleksandrov, P. S.; et al.**, (56 #8299)

Žukovs′ka, V. M. The origin and development of the method of quasiconformal mappings. (Ukrainian) (58 #21269)

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- **Gahov, F. D.** *See* **Litvinčuk, G. S.; et al.**, (54 #33)
- **Vekua, I. N.** *See* **Aleksandrov, P. S.; et al.**, (56 #8299)

Birthday:

- **Gahov, F. D.** *See* **Litvinčuk, G. S.; et al.**, (54 #33)
- **Vekua, I. N.** *See* **Aleksandrov, P. S.; et al.**, (56 #8299)

History of mathematics *See* **History of national mathematics in four volumes**, (58 #26682)

History of national mathematics in four volumes ★История отечественной математики в четырех томах. Том 4. Книги 1 и 2: 1917–1967. (Russian) [History of national mathematics in four volumes. Vol. 4. Books 1 and 2: 1917–1967] (58 #26682)

30–04 Explicit machine computation and programs (not the theory of computation or programming)

Abd-Elal, L. F. (*with* Delves, L. M.; Reid, John K.) A numerical method for locating the zeros and poles of a meromorphic function. 49 #7426

Delves, L. M. *See* **Abd-Elal, L. F.; et al.**, 49 #7426

Reid, John K. *See* **Abd-Elal, L. F.; et al.**, 49 #7426

30–06 Collections of papers; proceedings of conferences

(Alenicyn, Ju. E.) *See* **Extremal problems of the geometric theory of functions of a complex variable**, 50 #581

(Bavrin, I. I.) *See* **Mathematical analysis and the theory of functions**, 58 #22492

(Buckholtz, James D.) *See* **Complex analysis**, 56 #3260

(Clunie, J. G.) *See* **Proceedings: Symposium on Complex Analysis**, 52 #5944

(Frolov, Ju. N.) *See* **All-Union Symposium: Theory of the Approximation of Functions in the Complex Domain**, 57 #6374

(Gilbert, Robert Pertsch) *See* **Function theoretic methods in differential equations**, 57 #593

(Greenberg, Leon) *See* **Discontinuous groups and Riemann surfaces**, 49 #3089

(Gross, Fred) *See* **Proceedings: NRL Conference on Classical Function Theory**, 48 #505

(Hayman, W. K.) *See* **Proceedings: Symposium on Complex Analysis**, 52 #5944

(Hvedelidze, B. V.) *See* **Collection: Theory of functions**, 52 #3489 *and* **Collection: Theory of functions**, 55 #10648

(Kirwan, William E.) *See* **Zalcman, Lawrence**, 53 #776

(Kuz′mina, G. V.) *See* **Extremal problems of the geometric theory of functions of a complex variable**, 50 #13459

(Lavrent′ev, M. A.) *See* **Metric questions of the theory of functions and mappings**, 48 #6371

(Ławrynowicz, Julian) *See* **Proceedings: Finnish-Polish Summer School in Complex Analysis**, 57 #6376 *and* **Proceedings: Finnish-Polish Summer School in Complex Analysis**, 57 #16546

(Lehto, Olli) *See* **Proceedings: Finnish-Polish Summer School in Complex Analysis**, 57 #6376 *and* **Proceedings: Finnish-Polish Summer School in Complex Analysis**, 57 #16546

(Lukankin, G. L.) *See* **Mathematical analysis and the theory of functions**, 58 #22492

(Miller, Sanford S.) *See* **Complex analysis**, 57 #6375

(Mushelišvili, N. I.) *See* **Collection: Theory of functions**, 52 #3489; **Collection: Theory of functions**, 55 #10648 *and* **Function theoretic methods in differential equations**, 57 #593

(Nikol′skiĭ, N. K.) *See* **Investigations on linear operators and the theory of functions**, 48 #8758 *and* **Investigations on linear operators and the theory of functions**, 52 #14241 (EA 53)

(Pontrjagin, L. S.) *See* **Theory of functions and its applications, 57** #12826
(Serbina, A. I.) *See* **Methods of the theory of analytic functions,** (Not reviewed)
(Shah, Swarupchand M.) *See* **Complex analysis, 56** #3260
(Suffridge, Teddy J.) *See* **Complex analysis, 56** #3260
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Advances in complex function theory ★Advances in complex function theory. **53** #776
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Theory of the Approximation of Functions in the Complex Domain ★Всесоюзный симпозиум по теории аппроксимации функций в комплексной области (тезиćы докладов, Уфа, май 1976 г.). (Russian) [All-Union Symposium on the Theory of the Approximation of Functions in the Complex Domain (Abstracts of papers, Ufa, May 1976)] **57** #6374
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★Proceedings of the Sixth Conference on Analytic Functions. **54** #
Finnish-Polish Summer School in Complex Analysis ★Proceedings of th Finnish-Polish Summer School in Complex Analysis. Part II. **57** #6376
★Proceedings of the First Finnish-Polish Summer School in Complex Analysis. Part I. **57** #16546
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(Akutowicz, Edwin J.) *See* **L'analyse harmonique dans le domaine complexe,** (51
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(Bers, Lipman) *See* **Contributions to analysis,** (**48** #10737 (EA **48**))
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(Bīlīĭ, V. Ī.) *See* **Metric questions in the theory of functions and mappings,** (**58**
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lection:

Bers, Lipman *See* **Contributions to analysis**, (48 #10737 (EA 48))

Theory of functions ★Сборник работ по теории функций. 4. (Russian) [Collection of articles on the theory of functions. 4] (48 #5778)

mplex analysis and its applications ★Complex analysis and its applications. Vol. I. (57 #5539a)

★Complex analysis and its applications. Vol. II. (57 #5539b)

★Complex analysis and its applications. Vol. III. (57 #5539c)

★Комплексный анализ и его приложения. (Russian) [Complex analysis and its applications] (58 #20933)

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nference:

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ntributions to analysis ★Contributions to analysis. (48 #10737 (EA 48))

rrent problems in mathematics ★Современные проблемы математики. Том 4. (Russian) [Current problems in mathematics. Vol. 4] (56 #649)

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nctional analysis, theory of functions and their applications ★Функциональный анализ, теория функций и их приложения. Вып. 2, Часть 1. (Russian) [Functional analysis, theory of functions, and their applications. No. 2, Part 1] (57 #3805)

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rmonic analysis *See* **Collection: Theory of functions**, (48 #5778) *and* **L'analyse harmonique dans le domaine complexe**, (51 #5223)

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vestigations on linear operators and the theory of functions ★Исследования по линейным операторам и теории функций. VI. (Russian) [Investigations on linear operators and theory of functions. VI] (53 #5219)

★Исследования по линейным операторам и теории функций. VIII. (Russian) [Investigations on linear operators and the theory of functions. VIII] (58 #17880)

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appings *See* **Metric questions in the theory of functions and mappings**, (58 #20936) *and* **Quasiconformal mappings and the approximation of functions**, (58 #28490)

athematical programming and related questions ★Математическое программирование и смежные вопросы (Труды седьмой зимней школы, Дрогобыч, 1974). (Russian) [Mathematical programming and related questions (Proceedings of the Seventh Winter School, Drogobych, 1974)] (55 #16)

athematical theory of electromagnetism *See* **Symposia Mathematica**, (54 #2379)

etric questions of the theory of functions and mappings ★Метрические вопросы теории функций и отображений. (Russian) [Metric questions in the theory of functions and mappings] (58 #20936)

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oblems in modern function theory ★Некоторые вопросы современной теории функций. Материалы конференции. (Russian) [Problems in modern function theory. Proceedings of a Conference] (57 #15813)

oceedings: Winter School on Mathematical Programming and Related Questions *See* **Mathematical programming and related questions**, (55 #16)

uasiconformal mappings and the approximation of functions ★Квазиконформные отображения и приближение функций. (Russian) [Quasiconformal mappings and the approximation of functions] (58 #28490)

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udies in the theory of functions of a complex variable and its applications ★Дослідження з теорії функції комплексної змінної та її застосувань. (Russian and Ukrainian) [Studies in the theory of functions of a complex variable and its applications] (48 #5481)

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30A02 Monogenic properties of complex functions (including polygenic and areolar monogenic functions)

Beesack, Paul R. The Laurent expansion without Cauchy's integral theorem. **46** #9301

Berenšteĭn, M. N. Certain sufficient conditions for the analyticity of functions. (Russian) **45** #5322

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Lifšic, V. A. A locally analytic constructive function that is not analytic. (Russian) **45** #5320

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Roşculeţ, Marcel N. Fonctions monogènes sur des espaces de Riemann. VIII. Sur les transformations des fonctions ω-quasi monogènes sur des algèbres du second ordre. **48** #8759

Samuelsson, Åke A local mean value theorem for analytic functions. **47** #8822

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Conditions for the analyticity of functions of a complex variable. (Russian) **47** #3642

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Stammfunktionen komplexwertiger Funktionen. **45** #5321

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Secondary classifications:

Morev, I. A. The integral representation of monogeneous functions of several variable. (Russian) (**48** #482 (EA **49**))

Orevkov, V. P. A new proof of the uniqueness theorem for constructive differentiable functions of a complex variable. (Russian. English summary) (**52** #2845)

Simionescu, Claudia Lidia Sur la représentation intégrale de la solution de l'équation à dérivée aréolaire. (**45** #5605)

Smith, J. Denmead Harmonic analysis of scalar and vector fields in $\mathbf{R}^n$. (**46** #7789)

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30A04 Inequalities in the complex domain

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Gehring, F. W. Inequalities for condensers, hyperbolic capacity, and extremal lengths. **52** #5945

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Rubel, Lee A. (*with* Shields, Allen L.; Taylor, B. Alan) Mergelyan sets and the modulus of continuity of analytic functions. **54** #521

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Vasić, Petar M. (*with* Kečkić, Jovan D.) Some inequalities for complex numbers. **45** #2146

(*with* Janić, Radovan R.; Kečkić, Jovan D.) Errata: "A complementary triangle inequality" (Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 338-352 (1971), 77–81). **48** #2352

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Dinghas, Alexander Über die Anwendung einer Klasse von Integrodifferentialungleichungen auf einige Fragen der Analysis und der Funktionentheorie. (**49** #7446)

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Nessel, Rolf Joachim (*with* Wilmes, Gerhard) Nikolskii-type inequalities for trigonometric polynomials and entire functions of exponential type. (**58** #6872)

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Blambert, Maurice (*with* Chevalier, Georges) Sur l'existence de fonctions de Tschebyscheff associées à certains espaces de fonctions holomorphes. **53** #777

Brannan, D. A. (*with* Brickman, Louis) Coefficient regions for starlike polynomials. (Polish and Russian summaries) **56** #8819

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Carroll, Francis W. (*with* Eustice, Dan J.; Figiel, T.) The minimum modulus of polynomials with coefficients of modulus one. **58** #1102

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30A14 Analytic continuation

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A note on a certain functional equation concerning entire functions. **57** #9947

Uniqueness of the factorization under composition of certain entire functions. **57** #16557

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Yang, Chung Chun On the entire solutions of the functional equation $f(f(z))=F(z)$. **52** #14253

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Haruki, Shigeru On two functional equations connected with a mean-value property of polynomials. (**45** #548)

Jank, Gerhard *See* **Florian, Helmut**, (**45** #8970)

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Korobeĭnik, Juriĭ F. The existence of solutions of an equation of infinite order with a given growth character. (Russian) (**48** #8925)

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30A22 Continued fractions [See also 10A30, 40A15.]

Baker, George A., Jr. A theorem on the convergence of Padé approximants. **56** #8825

Callas, Nicholas P. (*with* Thron, W. J.) Singular points of certain functions represented by *C*-fractions. **45** #512

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Edrei, Albert Equidistribution of the arguments of the zeros of Padé numerators. **56** #8826

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Nikišin, E. M. The convergence of diagonal Padé approximants for certain functions. (Russian) **54** #10583

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Skorobogat′ko, V. Ja. A test for the convergence of a branching continued fraction. (Ukrainian. English and Russian summaries) **46** #2020

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30A24 Conformal mappings of special domains

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(*with* Porjadenna, V. I.) Construction of a function that maps a circular *n*-connected domain onto an annulus with circular cuts. (Russian) **52** #8395

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itvor′onna, L. M. On the question of mapping circular polygons. (Russian) **45** #8815

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A method for the approximate construction of a conformal mapping for multiply connected domains with smooth contours and with contours that contain corner points. (Russian) (Not reviewed)

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30A26 Covering theorems in conformal mapping theory

haronov, Dov (*with* Kirwan, William E.) A method of symmetrization and applications. **45** #516

(*with* Kirwan, William E.) A method of symmetrization and applications. II. **47** #2042

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30A28 Numerical methods in conformal mapping theory

Bereslavskiĭ, È. N. On the question of the integration of the differential equation of the mapping problem for a circular pentagon with a slit. (Russian) **51** #5905

On the question of the conformal mapping of simply connected domains onto the unit disc. (Russian. English summary) **57** #3363

Čeredničenko, L. A. (*with* Želankina, I. K.) Determination of the constants that occur in the Christoffel-Schwarz integral. (Russian) **53** #13535

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Dekanosidze, C. A. *See* **Samsonija, Z. V., 55** #637

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Fominyh, Ju. F. An approximate construction of the Green's function and of a conformal mapping. (Russian) **46** #3758a

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Dundučenko, L. O. (*with* Gončarenko, S. V.) The Christoffel-Schwarz formula generalized on *n*-connected circular domains. (Russian. English summary) (**58** #6197)

Gončarenko, S. V. *See* **Dundučenko, L. O.,** (**58** #6197)

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Hofmann, Reinhard Zur punktweisen konformen Abbildung unter Verwendung des harmonischen Masses. (54 #14325)

Howe, D. The application of numerical methods to the conformal transformation of polygonal boundaries. (49 #8297)

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Krabs, Werner (*with* Opfer, Gerhard) Eine Methode zur Lösung des komplexen Approximationsproblems mit einer Anwendung auf konforme Abbildungen. (53 #11270)

Landweber, Louis (*with* Miloh, T.) Elimination of corners in the mapping of a closed curve. (51 #869)

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Nepritvor′onna, L. M. The determination of the constants of the Christoffel-Schwarz integral for a mapping of the upper halfplane onto the exterior of an arbitrary polygon. (Russian) (45 #1358)

Opfer, Gerhard Über die Approximation der Identität im Komplexen. (52 #4593)

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Runck, Paul Otto Eine Bemerkung zum Banachschen Fixpunktsatz. (51 #8898)

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Berg, Paul W. A theorem on the boundary correspondence under conformal mapping with application to free boundary problems of fluid dynamics. (**50** #9139)
Bergman, Stefan ★The kernel function and conformal mapping. (**58** #22502)
Cheng, Henry A constructive Riemann mapping theorem. (**48** #1895)
Couchet, Gérard (*with* Laporte, Roland) Sur les profils aérodynamiques. (English summary) (**58** #19674)
Donoghue, William F., Jr. ★Monotone matrix functions and analytic continuation. (**58** #6279)
Gaier, Dieter Estimates of conformal mappings near the boundary. (**45** #2151)
Haruki, Hiroshi On an application of the "square" functional equation to a geometric characterization of quadratic functions from the standpoint of conformal-mapping properties. (**45** #759)
Heinhold, Josef Schmiegungsoperationen in der Praxis der konformen Abbildung. (**57** #6389)
Huber, Alfred Eine Klasse von hyperbolischen Verheftungen. (**55** #10666)
Jeltsch, Rita ★Der Riemannsche Abbildungssatz in der konstruktiven Analysis. (**57** #5705)
Kerzman, Norberto (*with* Stein, Elias M.) The Cauchy kernel, the Szegö kernel, and the Riemann mapping function. (**58** #6199)
Kufarev, B. P. Estimates of Hausdorff measures in the case of W_p^1 type mappings. (Russian) (**47** #6977)
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Investigations on linear operators and the theory of functions ★Исследования по линейным операторам и теории функций. III. (Russian) [Investigations on linear operators and the theory of functions. III] (**48** #8758)

Linear operators *See* **Investigations on linear operators and the theory of functions**, (**48** #8758)

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31A10 Integral representations

Andersen, Kenneth F. On the representation of harmonic functions by their values on lattice points. **54** #7804 (E **55** #3275)

Dahlberg, Björn E. J. On the radial boundary values of subharmonic functions. **57** #661

Dou, Alberto M. Kernels that are equivalent to the Dirac measure. (Spanish. Romanian summary) **48** #2407

Grač, I. M. Application of integral solutions to the computation of potential fields. (Russian) **53** #3325

Hensley, Douglas The logarithmic center of a planar region. **53** #11070

Kapanadze, Dž. V. S. Ja. Havinson's conjectures. (Russian) **57** #9985

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Tkebučava, V. V. *See* **Strahov, V. N., 50** #4981

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Pinsky, Mark A. Stochastic stability and boundary problems. (**56** #3454)

Sen, S. On generalised Poisson's integral and Dirichlet problem. (**58** #22582)

31A15 Potentials and capacity, harmonic measure, extremal length

Adams, David R. (*with* Meyers, Norman G.) Thinness and Wiener criteria for non-linear potentials. **47** #5272

Anger, Bernd Representation of capacities. **57** #6465

Arsove, Maynard Green's measure and harmonic measure. **46** #3814

Čekulaeva, A. A. *See* **Simonenko, I. B., 46** #3816

Cirul'skiĭ, A. V. (*with* Nikonova, F. I.) The solvability of the inverse problem of logarithmic potential in finite form. (Russian) **58** #22603

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Derrick, William R. Extremal length and Rayleigh's reciprocal theorem. **58** #1189

Essén, Matts R. A generalization of Beurling's estimate of harmonic measure. **58** #1190

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Gaier, Dieter Hölder-Stetigkeit und BMO des logarithmischen Potentials. **57** #16631

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Gusman, S. Ja. Series of holomorphic forms and composite potentials. (Russian) **58** #22604

Huckemann, Friedrich An extremal problem for harmonic measure. **58** #17146

Jackson, Howard L. On minimally thin sets in a Stolz domain. **46** #3815

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Kac, Mark (*with* Luttinger, J. M.) Scattering length and capacity. (French summary) **53** #5902

Kapanadze, Dž. V. A remark on linear and nonlinear potentials. (Russian) **53** #11071

Kayano, Takasi (*with* Ogawa, Shirô) Remarks on potential theoretic kernels. **52** #14324

Kishi, Masanori An example of a positive non-symmetric kernel satisfying the complete maximum principle. **47** #3692

Král, Josef Potentials and removability of singularities. (See Zbl **316** #00013; MR **51** #1079)

Lanzendorf, Margot Über stetige Funktionen, die sich als Wärmepotentiale darstellen lassen. **58** #11460

Ławrynowicz, Julian Eine Variationscharakterisierung der Kapazität des Kondensators. **50** #7558

Luttinger, J. M. (*with* Friedberg, R.) Some functional inequalities, with application to

Green's function. **53** #8451
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Maitani, Fumio On the boundary behavior of harmonic measures. **58** #11461
Matsuda, Minoru On the potential taken with respect to complex-valued kernels. **47** #7051
Meyer, Burnett On convergence in capacity. **54** #10626
Meyers, Norman G. Continuity properties of potentials. **51** #3477
See also **Adams, David R.**, **47** #5272
Morinaka, Hisashi On the outer radius. **55** #3277
Nikonova, F. I. (*with* Cirul′skiĭ, A. V.) On the question of the boundary singular points of a logarithmic potential. (Russian) **58** #22605
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Ninomiya, Nobuyuki A note on the transfinite diameter. **54** #566
Ogawa, Shirô *See* **Kayano, Takasi**, **52** #14324
Ohtsuka, Makoto A general definition of capacity. (French summary) **53** #11072
Osada, Masayuki Thin sets in an open unit disk. **49** #3167
Petrova, V. A. The approximate determination of the logarithmic potential of a single layer with electrostatic density. (Russian) **57** #16632
Preston, Christopher J. Some inequalities involving the Hardy-Littlewood maximal function in a theory of capacities. **45** #3743
Šahverdjan, A. Ju. Harmonic functions that are continuous on a singular set of zero capacity. (Russian. Armenian and English summaries) **58** #11462
Schulze, Bert-Wolfgang Potentiale bei der Wellengleichung im R^2 und Charakterisierung der Mengen der Kapazität Null. **51** #3478
Simonenko, I. B. (*with* Čekulaeva, A. A.) The capacity of a condenser that consists of infinite bands. (Russian) **46** #3816
Specht, E. J. (*with* Jones, H. T.) Compactness of the Neumann-Poincaré operator. **53** #5903
Strahov, V. N. On the theory of the logarithmic potential in the case of variable density of the perturbing masses. (Russian) **58** #22606
Suljandziga, P. B. On the question of the analytic continuation of the logarithmic potential. (Russian) **58** #17148
Symm, G. T. *See* **Jaswon, M. A.**, **58** #17147
Troutman, John L. The dielectric potential operator. **49** #9229
Planar dielectric potential functions. **46** #372
Turán, Pál A general inequality of potential theory. **50** #4982
Watson, N. A. Corrigendum: "Green functions, potentials, and the Dirichlet problem for the heat equation" (Proc. London Math. Soc. (3) **33** (1976), 251–298). **58** #17149
Wu, Jang Mei Gloria Variation of Green's potential. **56** #8873
Green's potentials with prescribed boundary values. **58** #17150
Boundary limits of Green's potentials along curves. **58** #17151
Yosida, Tokunosuke On the critical points of Evans potentials. **51** #8438

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Bagby, Thomas Quasi topologies and rational approximation. (**50** #7535)
Beljaev, V. A. The connection between the holomorphy of $f(z,w)$ in one variable and its holomorphy in both variables. (Russian) (**53** #5937)
Chung, Kai Lai Probabilistic approach in potential theory to the equilibrium problem. (**52** #12098)
Darst, Richard B. On the connection between Hausdorff measures and generalized capacity. (**48** #4252)
Essén, Matts R. A differential inequality with applications to subharmonic functions. (**54** #13182)
Fuka, Jaroslav (*with* Král, Josef) Analytic capacity and linear measure. (**58** #11370)
Gehring, F. W. Inequalities for condensers, hyperbolic capacity, and extremal lengths. (**52** #5945)
Hedberg, Lars Inge Removable singularities and condenser capacities. (**50** #13496)
Jenkins, James A. On a problem concerning harmonic measure. (**49** #567)
Král, Josef *See* **Fuka, Jaroslav**, (**58** #11370)
Makarov, V. L. *See* **Položiĭ, G. M.**, (**45** #7134) *and* **Položiĭ, G. M.**, (**45** #7135)
Minda, Carl David Capacity estimates for planar Cantor-like sets. (**50** #4933)
Ortel, Marvin Interpolation by linear sums of harmonic measures. (**52** #3540)
Pallmann, M. S. On level curves of Green's functions. (**57** #613)
Položiĭ, G. M. (*with* Makarov, V. L.) A generalization of the summary representation formulas for an axially symmetric potential. (Russian. English summary) (**45** #7134)
(*with* Makarov, V. L.) A generalization of the summary representation formulas for an axially symmetric potential, and special functions of a discrete argument of the first and second kind. II. (Russian. English summary) (**45** #7135)
Port, Sidney C. (*with* Stone, Charles J.) Classical potential theory and Brownian motion. (**53** #11778)
(*with* Stone, Charles J.) Logarithmic potentials and planar Brownian motion. (**53** #11779)
(*with* Stone, Charles J.) ★Brownian motion and classical potential theory. (**58** #11459)
Širokov, N. A. Certain properties of analytic capacity. (Russian. English summary) (**46** #345)
Stone, Charles J. *See* **Port, Sidney C.**, (**53** #11778); **Port, Sidney C.**, (**53** #11779) *and* **Port, Sidney C.**, (**58** #11459)

31A20 Boundary behavior (Fatou type theorems, etc.)

Arsove, Maynard (*with* Leutwiler, Heinz) Painlevé's theorem and the Phragmén-Lindelöf maximum principle. **46** #7533
Bočorišvili, M. A. Behavior of analytic and harmonic functions near the boundary. (Russian. Georgian and English summaries) **45** #8865
Choi, Un Haing A curvilinear extension of the maximum principle for harmonic functions. **48** #8817
Gorbaičuk, V. I. (*with* Zadereĭ, P. V.) Certain boundary properties of functions harmonic in a strip. (Russian) **54** #7805
Guggenheimer, Heinrich W. Concave solutions of a Dirichlet problem. **48** #8818
Hornblower, R. J. M. (*with* Thomas, Edward S., Jr.) The access theorem for subharmonic functions. **46** #7534
Král, Josef Potentials and boundary value problems. **55** #3278a (E **55** #3278b)
Correction of some misprints in my paper "Potentials and boundary problems" published in "Wissenschaftliche Schriftenreihe der T. H. Karl-Marx-Stadt". **55** #3278b
Kufarev, B. P. Potentials and boundary correspondence. (Russian) **58** #17152
Leutwiler, Heinz *See* **Arsove, Maynard**, **46** #7533
Meek, James L. On Fatou points of normal subharmonic functions. **57** #3406
Nakai, Mitsuru A test of Picard principle for rotation free densities. **52** #773
Pacevič, E. L. Estimates for functions harmonic in the unit disc, and their applicati inverse boundary value problems. (Russian) **56** #8874
Estimates for harmonic functions, and their application to inverse boundary problems. (Russian) **56** #8875
Schiff, Joel L. On a set of poles at the Wiener boundary. **55** #10704
Talpur, M. N. M. A subharmonic analoque of Iversen's theorem. **51** #13251
Thomas, Edward S., Jr. *See* **Hornblower, R. J. M.**, **46** #7534
Veselý, Jiří Angular limits of double layer potentials. (Czech. English summary) **52** #3558
Walter, Gilbert G. Hermite series as boundary values. **53** #5904
Wolfe, Peter Some results on the boundary regularity of harmonic functions. **53** #11073
Zadereĭ, P. V. *See* **Gorbaičuk, V. I.**, **54** #7805
Žil′cova, N. D. The formulation and basic properties of an oblique derivative prob related to continuous transformations. (Russian) **58** #17153

Secondary classifications:

Anger, Gottfried Direct and inverse problems in potential theory. (**58** #1198)
Berenstein, Carlos A. (*with* Taylor, B. Alan) The "three-squares" theorem for continuous functions. (**56** #3335)
Choi, Un Haing A note on a maximum theorem for harmonic functions. (Ko summary) (**46** #3795)
Dahlberg, Björn E. J. On the radial boundary values of subharmonic functions. (**57** #661)
Gasanov, Gasan Panah-ogly An inventory method for solving Poisson's equation. (Russian) (**56** #12560)
The Poisson and the Laplace equation in special curvilinear coordinate syst (Russian) (**56** #12561)
Hornblower, R. J. M. Subharmonic analogues of MacLane's classes. (**51** #896)
Schiff, Joel L. Harmonic null sets and the Painlevé theorem. (**48** #8784)
Taylor, B. Alan *See* **Berenstein, Carlos A.**, (**56** #3335)
Topurija, S. B. Boundary properties of a differentiated Poisson integral in the half-p (Russian. Georgian and English summaries) (**52** #5971)
Walter, Gilbert G. Local boundary behavior of harmonic functions. (**45** #7467)
Yamashita, Shinji Complex-harmonic Meier's theorem. (**46** #362)

31A25 Boundary value and inverse problems

Albinus, Günter Über die Greensche Funktion für den Operator $L = D + \gamma$ und beschränkte Gebiete. **53** #5905
Atahodžaev, M. A. (*with* Salihov, Š. N.) On the uniqueness question in the inv problem of potential theory. (Russian) **57** #12874
(*with* Serikbaev, A. U.) A plane inverse problem of potential theory. (Rus **58** #28553
(*with* Kobilov, U. È.) A problem for Laplace's equation. (Russian) **55** #838
(*with* Serikbaev, A. U.) The existence of a solution of the interior inverse pro of logarithmic potential. (Russian) **58** #22607
Barański, Feliks (*with* Wachnicki, Eugeniusz) Orlicz space and Dirichlet problem. **52** #11079
Beznoščenko, N. Ja. On the inverse problem of the logarithmic potential. (Rus **49** #5378
Burkovskaja, V. L. Polynomial solution of the Dirichlet problem of generalized ax symmetric potential theory. (Russian. English summary) **58** #6288
Čeredničenko, V. G. Interior inverse problems for the logarithmic potential. (Rus **45** #5390
Inverse problems of the logarithmic potential with analytic density. (Rus **47** #8883
The solvability of the interior inverse problem for the logarithmic pote (Russian) **51** #8439
The solvability "in the small" of the inverse problem of logarithmic pote (Russian) **51** #5941
Determination of the density of a body from a prescribed potential. (Rus **53** #13597
The solvability "in the small" of the inverse problem of potential with var density in the two-dimensional case. (Russian) **54** #10627
Chang, Ki P'ung An inverse boundary value problem for nonlinear systems of equa of first order. (Korean. English summary) **58** #17154
Chang, Shih Chih On the solution of Dirichlet's problem for the Laplace equa **49** #9230
Christiansen, Søren Integral equations without a unique solution can be made usefu solving some plane harmonic problems. **53** #3326
Čigarev, V. N. A certain method for the continuation of a solution of the first boun value problem to a multiply connected domain. (Russian) **49** #9231
Čilap, A. Ja. A case of the full conjugation problem for harmonic functions. (Rus **58** #17155
Cygankov, A. A. Efficient construction of the solution of the Dirichlet problem Laplace's equation. (Russian) **48** #546
Daniljuk, Ĭ. Ĭ. (*with* Oliĭnik, M. V.) The uniqueness of the solution of a certain nonl problem with a free boundary. (Ukrainian. English and Russian summaries) **46** #2023 (EA **47**)

(*with* Mihaljuk, M. Ī.) The local uniqueness of the solution of the inverse logarithmic potential problem. (Ukrainian. English and Russian summaries) **48** #2408

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edenko, N. P. *See* **Liskovec, O. A., 45** #577

inkelstein, Mark (*with* Scheinberg, Stephen) Kernels for solving problems of Dirichlet type in a half-plane. **52** #3559

abov, S. A. Angular potential and some of its applications. (Russian) **57** #3407

Angular potential and the oblique derivative problem for harmonic functions. (Russian) **58** #22608

orbaičuk, V. I. (*with* Zadereĭ, P. V.) Properties of the solutions of the Dirichlet problem for the disc and strip. (Russian) **56** #12287

aĭdarov, A. H. A certain inverse problem of potential theory. (Russian) **52** #14325

acob, Caius Elementary methods for solving the plane harmonic Dirichlet problem for some canonical domains. **58** #17156

sakov, V. M. The uniqueness of the solution of the contact inverse problem of potential theory. (Russian) **46** #3817

The solvability of the inverse problem of potential theory. (Russian) **50** #4983

The solvability of the inverse problem of potential theory. (Russian) **50** #4984

The uniqueness of the reconstruction of a domain and the density from the exterior potential. (Russian) **50** #4985

ansons, J. Justification of the gluing method for a certain Dirichlet problem. (Russian. Latvian and English summaries) **49** #10897

Janušauskas, Algimantas A certain boundary value problem for a system of harmonic functions. (Russian) **49** #3168

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Kapanadze, Dž. V. Equilibrium potentials and the weak topology. (Russian. Georgian and English summaries) **58** #6289

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Kečkić, Jovan D. Dirichlet's problem for the annulus. **51** #5942

Kinderlehrer, David (*with* Stampacchia, Guido) A free boundary value problem in potential theory. (French summary) **58** #22609

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Kobilov, U. È. *See* **Atahodžaev, M. A., 55** #8383

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Korduba, B. M. (*with* Martinovič, T. L.) The Dirichlet problem for a plane with gaps. (Ukrainian. Russian summary) **46** #9367

Kovtun, I. M. Certain boundary value problems for an iterated equation of generalized axially symmetric potential theory. (Russian) **45** #3745

Solution of certain boundary value problems for problems of generalized axially symmetric potential theory. (Russian) **46** #3818

Lavery, John E. Solution of inhomogeneous quasilinear Dirichlet and Neumann problems by reduction to the Poisson equation and a posteriori error bounds. **58** #1191

Lavrenjuk, S. P. The stability of inverse problems of logarithmic potential. (Russian) **49** #9232

(*with* Parasjuk, Ē. M.) Integral estimates of the stability of the inverse problem for the metaharmonic potential of a simple layer. (Ukrainian. Russian summary) **53** #835

Leppington, F. G. (*with* Levine, Harold) Some axially symmetric potential problems. **48** #2409

Levine, Harold *See* **Leppington, F. G., 48** #2409

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Lorenzi, Alfredo A mixed boundary value problem for the Laplace equation in an angle. I. (See Zbl **345** #35037)

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Makarov, V. L. (*with* Klunnīk, O. O.) Elimination of singularities in the solution of boundary value problems in the theory of generalized axially symmetric potential. (Russian. English summary) **57** #16633

Markuševič, L. A. The solution of a mixed boundary value problem that is connected with the calculation of the electric potential on the plate of a Hall transformer. (Russian) **57** #662

Martinovič, T. L. *See* **Korduba, B. M., 46** #9367

Maz′ja, V. G. The index of closure of the operator of the Dirichlet problem in a domain with a nonregular boundary. (Russian) **58** #22610

Mel′nik, R. S. An application of Poisson's formula to the solution of the harmonic and the biharmonic problem. (Russian) **57** #3408

Mihaljuk, M. Ī. A theorem on the existence of a solution of the inverse problem of logarithmic potential. (Ukrainian. English and Russian summaries) **48** #6445

The local uniqueness of the solution of the inverse problem of logarithmic potential for variable density. (Russian) **49** #9233

A theorem on the existence of a solution of the inverse problem of logarithmic potential. (Russian. English summary) **57** #3409

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Nedjalkov, I. P. (*with* Stojanova, I.) Analytic continuation of a harmonic function given on a line or a segment. (Bulgarian. Russian and English summaries) **45** #7089

Netuka, Ivan Double layer potential representation of the solution of the Dirichlet problem. **47** #5273

The third boundary value problem in potential theory. **55** #686

Nicolaide, Andrei An expression of the potential function for third kind boundary conditions. **47** #3694

Olīīnik, M. V. *See* **Daniljuk, Ī. Ī., 46** #2023 (EA **47**)

Parasjuk, Ē. M. (*with* Sen′o, P. S.) A certain inverse problem for the logarithmic potential of a simple layer. (Ukrainian. Russian summary) **53** #11074

See also **Lavrenjuk, S. P., 53** #835

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Prilepko, A. I. Inverse problems of logarithmic potential for the case of a body that is near a given one. (Russian) **49** #3169

Prusov, Ī. O. A certain solution of certain boundary value problems for harmonic functions. (Ukrainian. Russian summary) **46** #9368

Radžabov, N. S. (*with* Sattarov, A. S.) A study of exterior boundary value problems of Dirichlet and Neumann type for the fundamental equation of axially symmetric field theory by the potential method. (Russian. Tajiki summary) **52** #14326

Ranger, K. B. The solution of a new mixed boundary value problem by use of an integral transformation. (French, German, Italian and Russian summaries) **56** #641

Rešetnikov, Ju. A. An inverse mixed problem of electrostatics. (Russian) **57** #9986

Salihov, Š. N. *See* **Atahodžaev, M. A., 57** #12874

Sattarov, A. S. *See* **Radžabov, N. S., 52** #14326

Scheinberg, Stephen *See* **Finkelstein, Mark, 52** #3559

Schleiff, Martin Über geschlossene Lösungen des Poincaréschen Randwertproblems mit Hilfe einer komplexen Differentialgleichung. **58** #6290

Schubert, Hans Über das Randwertproblem von Poincaré in der Ebene. (Russian, English and French summaries) **53** #11075

Schulze, Bert-Wolfgang Mengen der Kapazität Null für nichtelliptische Differentialgleichungen. Das Dirichlet-Problem für $u_{xy}=0$. **48** #6446

Sen′o, P. S. *See* **Parasjuk, Ē. M., 53** #11074

Serikbaev, A. U. *See* **Atahodžaev, M. A., 58** #22607 *and* **Atahodžaev, M. A., 58** #28553

Shah, Manilal Harmonic functions and boundary value problems. **54** #7806

Sjögren, Peter Estimates of mass distributions from their potentials and energies. **46** #9369

Sloss, James M. A new integral equation for certain plane Dirichlet problems. **55** #10706

Soldatov, A. P. The uniqueness of the solution of a certain problem of A. V. Bicadze. (Russian) **45** #5393

Specht, E. J. *See* **Jones, H. T., 47** #3693

Stampacchia, Guido *See* **Kinderlehrer, David, 58** #22609

Starokadoms′kiĭ, L. O. The approximation of the solutions of the Dirichlet problem in a plane with gaps. (Ukrainian. Russian summary) **47** #3695

The solution of an integral equation of the first kind with a logarithmic kernel and of the Dirichlet problem in the plane with a gap. (Ukrainian. Russian summary) **47** #3696

Stojan, N. M. *See* **Kapšivii, O. O., 56** #12288

Stojanova, I. *See* **Nedjalkov, I. P., 45** #7089

Strahov, V. N. Nonuniqueness of the solution of the plane inverse potential problem. **54** #7807

On the question of the uniqueness of the solution of the plane inverse problem of potential theory. (Russian) **52** #11080

The analytic continuation of two-dimensional potential fields into the exterior of an arbitrary simply connected domain of the lower half-plane. (Russian) **52** #11081

The theory of the analytic continuation of two-dimensional potential fields in a domain of the lower half-plane. (Russian) **52** #11082

Functional equations of the plane inverse potential problem, and numerical algorithms for the approximate solution of that problem. (Russian) **50** #2521

Suljandziga, P. B. The plane inverse problem for magnetic potential. (Russian) **57** #12875

The solvability of the two-dimensional inverse problem of magnetic potential. (Russian. Georgian and English summaries) **58** #17157

Symm, G. T. Problems in two-dimensional potential theory. **58** #11463

Tepper, David E. On a free boundary problem, the starlike case. **51** #3479

Vasil′ev, B. A. A mixed boundary value problem of the stationary theory of heat conduction for the half-plane with boundary condition of the third kind. (Russian) **51** #5943

Vekua, I. N. A certain method of solution of the fundamental biharmonic boundary value problem and the Dirichlet problem. (Russian) **45** #5394

Veselý, Jiří Some remarks on Dirichlet problem. **58** #1192

Wachnicki, Eugeniusz *See* **Barański, Feliks, 52** #11079

von Wolfersdorf, Lothar Ein spezielles Kopplungsproblem für harmonische Funktionen. **45** #7085

Zadereĭ, P. V. *See* **Gorbaĭčuk, V. I., 56** #12287

Secondary classifications:

Blech, J. J. A theorem on field problems with free boundary conditions. (**47** #2839)

Bondarenko, P. S. (*with* Danilovič, V. P.) Algorithms of the numerical solution of the inverse problem for the logarithmic potential. (Russian. English summary) (**45** #4685)

Čeredničenko, V. G. An inverse problem for a Cauchy type integral. (Russian) (**58** #1170)

Christiansen, Søren On Kupradze's functional equations for plane harmonic problems. (**53** #12145)

Curtiss, J. H. Overdetermined harmonic polynomial interpolation. (**49** #3373)

Danilovič, V. P. *See* **Bondarenko, P. S.,** (**45** #4685)

Fraser, David F. A probabilistic method for the rate of convergence to the Dirichlet problem. (**47** #9736)

Gabov, S. A. The Green function of the Laplace operator in the plane problem with an oblique derivative with constant coefficients. (Russian) (**58** #17466)

Gaier, Dieter Hölder-Stetigkeit und BMO des logarithmischen Potentials. (**57** #16631)

Hać, Aleksander Non-linear boundary-value problem in the plane for a system of partial differential equations. (**48** #6660)

Isakov, V. M. An inverse problem of potential theory for the string equation. (Russian) (**48** #4520)

Kori, Tosiaki Neumann problem on a symmetric Brelot's harmonic space. (**58** #11475)

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31A30 Biharmonic, polyharmonic functions and equations, Poisson's equation

Atahodžaev, M. A. A certain problem for the biharmonic equation. (Russian. Uzbek summary) **51** #13252

Determination of a biharmonic function from its values on the boundary and on a certain set inside the domain of regularity. (Russian) **58** #28554

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Burns, J. C. The iterated equation of generalized axially symmetric potential theory. V. Generalized Weinstein correspondence principle. **56** #5909

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Kawamura, Michihiko (*with* Nakai, Mitsuru) A test of Picard principle for rotation free densities. II. **53** #8452

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Saak, È. M. The stability of the Dirichlet problem for a polyharmonic equation. (Russian) **45** #2197

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Wang, Cecilia Y. *See* **Sario, Leo; et al.**, **58** #22612

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31A35 Connections with differential equations

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31A99 None of the above, but in this section

Firebaugh, Morris W. *See* **Piele, Donald T.; et al.**, **58** #6291

Maitani, Fumio Boundary behavior of harmonic measures. **51** #13253

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31Bxx Higher dimensional theory

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31B05 Harmonic, subharmonic, superharmonic functions

Alinhac, Serge Une caractérisation des fonctions harmoniques dans un ouvert borné p "certaines propriétés de moyenne". **53** #8453

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Antoncev, S. N. On a problem of M. A. Lavrent′ev. (Russian) **57** #3410

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Caffarelli, Luis A. On the Hölder continuity of multiple valued harmonic functions. **53** #836

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Fuglede, Bent Asymptotic paths for subharmonic functions. **52** #775

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Jackson, Howard L. Sur la comparaison des duex types d'effilement. **54** #7810

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The absence of critical points of harmonic functions that are regular in symmetric domains. (Russian) **48** #8820

The behavior of harmonic mappings in the neighborhood of nondegenerate critical points of the defining functions. (Russian. Lithuanian and English summaries) **51** #13255

Singular points of harmonic mappings. (Russian) **49** #3170

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Kudina, L. S. Estimates for functions that are representable in the form of a difference of functions subharmonic in the ball. (Russian) **45** #7086

Kuran, Ü. Harmonic majorizations in half-balls and half-spaces. **47** #3697

A criterion of harmonic majorization in half-spaces. **47** #3698

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On Brelot-Choquet axial polynomials. **45** #2195

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Martynenko, Mih. D. Three-dimensional harmonic functions in domains with "cracks". (Ukrainian. Russian summary) **50** #13569

Mastrangelo-Dehen, Michèle Limites de fonctions finement harmoniques, différentiabilité stochastique des fonctions finement harmoniques. (English summary) **57** #9988

Masuda, Kyûya A remark on superharmonic functions. **58** #11465

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Moreau, Jean-Jacques Majorantes surharmoniques minimales d'une fonction continue. (English summary) **52** #5997

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Topurija, S. B. The local boundary properties of harmonic functions in a ball. (Russian) **55** #8386

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Kapanadze, Dž. V. Newtonian potentials and a conjecture of E. B. Dynkin. (Russian) (**48** #9862)

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Nogin, M. V. Solution of a certain problem of the theory of axially symmetric potential for a system of two spherical circular disks. (Russian. English summary) (**45** #7083)

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Pokorná, Eva Harmonic functions on convex sets and single layer potentials. (Lo Russian summary) **56** #3321

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31B25 Boundary behavior

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31B30 Biharmonic and polyharmonic equations and functions

Anikst, T. L. The stabilization of the solutions of a mixed problem for a certain system of equations that contain a polyharmonic operator. (Russian) **45** #2196

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Prilepko, A. I. A certain method of expanding a solid metaharmonic potential in an integro-power series. (Russian) **45** #582
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53 #13602; **Nakai, Mitsuru**, **57** #12880 *and* **Nakai, Mitsuru**, **58** #1203

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(Polish. English and Russian summaries) **50** #10291
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al., **49** #7467; **Sario, Leo**, **49** #9237; **Mirsky, Norman; et al.**, **50** #2530; **Sario, Leo**, **50** #2532; **Sario, Leo**, **50** #7560 *and* **Hada, Dennis; et al.**, **53** #13602

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приложения к задачам теории упругости. (Russian) [Quasipolynomial functions
their applications to problems in elasticity theory] (**58** #19008)

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Foht, O. S. Integral estimates in the L_p metric of the derivatives of a polyharmo
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(Russian) (**45** #706)

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Malliavin-Brameret, Marie-Paule (*with* Malliavin, Paul) Intégrales de Lusin-Calde
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finite Laplacians. (**46** #9897)
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Pokazeev, V. I. A general representation of the automorphic solution of the equat
$\Delta^n u=0$. (Russian. Georgian and English summaries) (**46** #9339)

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order elliptic equations. (Russian) (**54** #714)

Sario, Leo (*with* Wang, Cecilia Y.) The class of (p,q)-biharmonic functions. (**47** #5780)
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Poincaré 3-ball. (**50** #14582)
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(*with* de la Pradelle, Arnaud) Espaces de Sobolev sur les ouverts fins. (English summary) **52** #3565

nssen, Klaus Martin boundary and $\mathcal{H}^p$-theory of harmonic spaces. **52** #14337

See also **Bliedtner, Jürgen, 48** #8823

iselman, Christer O. Functionals on the space of solutions to a differential equation with constant coefficients. The Fourier and Borel transformations. **58** #28561

cCoy, Peter A. Generalized axisymmetric potentials. **52** #11087

Generalized axisymmetric elliptic functions. **52** #11088

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la Pradelle, Arnaud *See* **Feyel, Denis, 52** #3565 *and* **Feyel, Denis, 52** #14336

uinn, Dennis W. (*with* Weinacht, Richard J.) A mean value theorem in generalized bi-axially symmetric potential theory. (Italian summary) **52** #8461

adžabov, N. S. Potentials and an analogue of the Poisson formula for a certain second order equation with *n* singular hyperplanes. (Russian) **56** #3326

itter, Gunter Konstruktion von Operatoren und Kernen mit Hilfe von Absorptionsmengen. **51** #13258

jögren, Peter Harmonic spaces associated with adjoints of linear elliptic operators. (French summary) **53** #5909

einacht, Richard J. *See* **Quinn, Dennis W., 52** #8461

alcman, Lawrence Mean values and differential equations. **49** #613

Secondary classifications:

lbinus, Günter Potentialtheorie für lineare elliptische Differentialgleichungen zweiter Ordnung mit konstanten reellen Koeffizienten in "kleinen" Gebieten. (**51** #1101)

eyel, Denis (*with* de la Pradelle, Arnaud) Nouvelle démonstration de l'inégalité de Harnack pour un opérateur elliptique à coefficients discontinus. (English summary) (**52** #6169)

e la Pradelle, Arnaud *See* **Feyel, Denis,** (**52** #6169)

chulze, Bert-Wolfgang (*with* Wildenhain, Günther) Zur Potentialtheorie für stark elliptische Systeme mit konstanten Koeffizienten. (**50** #2693)

Potentials for higher order elliptic equations, and inverse problems. (Russian) (**58** #6673)

ološina, M. S. Certain properties of integrals of single layer potential type. (Ukrainian. Russian summary) (**46** #509)

Wildenhain, Günther Allgemeine Entwicklungstendenzen der Theorie der linearen elliptischen Randwertprobleme in den vergangenen Jahrzehnten. (Russian, English and French summaries) (**57** #3621)

Ein funktionalanalytischer Zugang zum Dirichlet-Problem bei elliptischen Differentialgleichungen mit variablen Koeffizienten. (**49** #840)

See also **Schulze, Bert-Wolfgang,** (**50** #2693)

31B99 None of the above, but in this section

Armitage, D. H. A counter-example in potential theory. **51** #8443

Efimov, A. B. *See* **Vorob′ev, V. N.; et al., 54** #2997

Kapanadze, Dž. V. Certain properties of α-harmonic functions. (Russian. Georgian and English summaries) **52** #8462

Konšina, E. V. *See* **Vorob′ev, V. N.; et al., 54** #2997

Kreß, Rainer Robinsches und Pragersches Problem der Potentialtheorie bei beliebiger Dimension. (English summary) **53** #13603

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Marden, Morris Axisymmetric harmonic interpolation polynomials in $\mathbf{R}^N$. **50** #628

Rempel, Stephan Über die Nichtvollständigkeit eines Raumes von Ladungen mit endlicher Energie. **53** #13604

Sario, Leo (*with* Wang, Cecilia Y.) Radial quasiharmonic functions. **48** #550

Šneerson, M. S. (*with* Lopatina, T. M.) Conjugate functions and analytic functions of two complex variables. (Russian) **49** #5383

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Vorob′ev, V. N. (*with* Efimov, A. B.; Konšina, E. V.; Starostina, L. F.) The Green's function of a three-dimensional Riemann space with two parallel branch curves. (Russian) **54** #2997

Wang, Cecilia Y. *See* **Sario, Leo, 48** #550

Secondary classifications:

Albinus, Günter Bemerkungen zu einer potentialtheoretischen Methode. (**48** #2545)

Bear, H. S. Corrections to: "Ordered Gleason parts" (Pacific J. Math. **62** (1976), no. 2, 337–349). (**57** #10415)

Fempl, Stanimir Über eine Klassifikation der nichtanalytischen Funktionen. (**46** #7525)

Mizumoto, Hisao On harmonic difference forms on a manifold. (**53** #9268)

Stein, Elias M. (*with* Weiss, Guido) ★Introduction to Fourier analysis on Euclidean spaces. (**46** #4102)

Weiss, Guido *See* **Stein, Elias M.,** (**46** #4102)

Zaharjuta, V. P. Isomorphism of spaces of harmonic functions. (Russian) (**50** #2889)

31Cxx Other generalizations

Secondary classifications:

Berg, Christian Transformation de Fourier de mesures de type positif sur un groupe abélien localement compact. (**57** #17125)

31C05 Harmonic, subharmonic, superharmonic functions

Anandam, I. Victor Potentials in a B.S. harmonic space. **54** #572

H-functions and B. S. potentials. **58** #17164

Arsove, Maynard (*with* Leutwiler, Heinz) Quasi-bounded and singular functions. **52** #777

(Bauer, Heinz) *See* **Constantinescu, Corneliu; et al., 54** #7817

Berg, Christian Sur les semi-groupes de convolution. **52** #778

(*with* Forst, Gunnar) A remark on the behaviour at infinity of the potential kernel. **52** #779

(*with* Forst, Gunnar) ★Potential theory on locally compact abelian groups. **58** #1204

Bliedtner, Jürgen (*with* Janssen, Klaus) Bezugsmasse und dominante Masse in harmonischen Räumen. **47** #8889

Extreme harmonic functions on groups. **51** #13259

Bozonis, Petros Harmonic functions on Riemannian manifolds. **50** #13579

Brelot, Marcel Allure des potentiels à la frontière et fonctions fortement sousharmoniques. **54** #10633

Caballero, Emilia Propriétés de connexité en topologie fine. **54** #10634

Caffarelli, Luis A. Certain multiple valued harmonic function. **52** #8463

Chung, Lung Ock (*with* Sario, Leo; Wang, Cecilia Y.) Riemannian manifolds with bounded Dirichlet finite polyharmonic functions. **57** #9994

(*with* Sario, Leo; Wang, Cecilia Y.) Quasiharmonic L^p-functions on Riemannian manifolds. **53** #13607

(*with* Sario, Leo) Harmonic and quasiharmonic degeneracy of Riemannian manifolds. **55** #12936

Asymptotic behavior and degeneracy of biharmonic functions on Riemannian manifolds. **55** #3284

(*with* Sario, Leo; Wang, Cecilia Y.) Biharmonic and quasiharmonic degeneracy. **58** #28562

(*with* Sario, Leo; Wang, Cecilia Y.) Harmonic and polyharmonic degeneracy. **57** #9995

Constantinescu, Corneliu (*with* Cornea, Aurel) ★Potential theory on harmonic spaces. **54** #7817

Cornea, Aurel *See* **Constantinescu, Corneliu, 54** #7817

Debiard, Amédée (*with* Gaveau, Bernard) ★Différentiabilité des fonctions finement harmoniques. **54** #7818

(*with* Gaveau, Bernard) Différentiabilité des fonctions finement harmoniques. **53** #3333

Doob, Joseph L. Remarks on the boundary limits of harmonic functions. **52** #14338

Essén, Matts R. (*with* Lewis, John L.) The generalized Ahlfors-Heins theorem in certain *d*-dimensional cones. **50** #629

Forst, Gunnar *See* **Berg, Christian, 52** #779 *and* **Berg, Christian, 58** #1204

(Fuglede, Bent) *See* **Caballero, Emilia, 54** #10634

Gaveau, Bernard Potentiel de Green fin et approximation fine dans les espaces de Sobolev. (English summary) **52** #3566

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Glasner, Moses Canonically isomorphic spaces of bounded solutions of $Du = Pu$. **53** #13608

(*with* Nakai, Mitsuru) The roles of nondensity points. **54** #573

González de Buitrago Díaz, Gonzalo The Montel space of vector-valued functions that are harmonic in a domain. (Spanish) **56** #8881

Huber, Alfred Subharmonische Funktionen und einige ihrer Anwendungen. **58** #28563

Ichim, Ion Fonctions de Tonelli sur une variété riemannienne. **51** #10657

Fonctions de Dirichlet sur une variété riemannienne. **52** #780

Ikegami, Teruo On a generalization of the theorem of Reisz-Frostman-Nevanlinna. **47** #8890

Imai, Hideo The value distribution of harmonic mappings between Riemannian *N*-spaces. **52** #14339

Itô, Masayuki Le principe relatif de domination et le principe transitif de domination pour les noyau-fonctions boréliennes. **55** #3285

Sur l'unicité du cône convexe divisible relatif au noyau de convolution de Hunt défini par l'opérateur différentiel. **55** #3286

Itô, Seizô On definitions of superharmonic functions. (French summary) **54** #5484

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Janušauskas, Algimantas A generalization of mappings that are harmonic in the sense of M. A. Lavrent′ev. (Russian) **58** #22622

Kishi, Masanori Some remarks on the existence of a resolvent. (French summary) **53** #11081

Kori, Tosiaki La théorie des espaces fonctionnels à nullité 1 et le problème de Neumann sur les espaces harmoniques. (English summary) **58** #22623

Kovtun, I. M. Analytic properties of the solutions of an iterated equation of generalized axially symmetric potential theory. (Russian. English summary) **56** #15959

Kuran, Ü. Two results on means of harmonic functions. **52** #8464

Subharmonic behaviour of $|h|^p$ ($p > 0$, h harmonic). **50** #4993

Kwon, Young K. (*with* Sario, Leo; Walsh, B.) Behavior of biharmonic functions on Wiener's and Royden's compactifications. (French summary) **49** #5385

Bounded harmonic but no Dirichlet-finite harmonic. **54** #2998

(*with* Schiff, Joel L.) Counterexamples for the space of minimal solutions of the equation $\Delta u = Pu$ on a Riemann surface. **51** #8444

Behavior of Φ-bounded harmonic functions at the Wiener boundary. **52** #3567

Leutwiler, Heinz *See* **Arsove, Maynard, 52** #777

Lewis, John L. *See* **Essén, Matts R., 50** #629

Lumer, Gunter Problème de Cauchy et fonctions surharmoniques. **58** #28564

Maeda, Fumi-Yuki On regularity of boundary points for Dirichlet problems of the equation $\Delta u = qu$ ($q > 0$). **47** #8891

Meyer, Paul-André Représentation intégrale des fonctions excessives résultats de Mokobodzki. **51** #13260

Deux petits résultats de théorie du potentiel. **51** #13261

Le théorème de dérivation de Lebesgue par rapport à une résolvante (d'après G. Mokobodzki). **54** #10635

Mirsky, Norman (*with* Sario, Leo; Wang, Cecilia Y.) Parabolicity and existence of bounded or Dirichlet finite polyharmonic functions. (Italian summary) **53** #13605

Nakai, Mitsuru (*with* Sario, Leo) Manifolds with strong harmonic boundaries but without Green's functions of clamped bodies. **54** #7819

Extremizations and Dirichlet integrals on Riemann surfaces. **54** #574

(*with* Sario, Leo) Harmonic functions on a Riemannian ball. **54** #575

Picard principle and Riemann theorem. 53 #13609
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Nasser Chafii, Mohamed Sur un théorème de Hans Lewy. 55 #3287
Neri, Umberto Funzioni armoniche aventi traccia in $L^p(R^n)$, B.M.O., ed altri spazi funzionali. 57 #6474
Netuka, Ivan A remark on semiregular sets. (Czech) 49 #5384
Nickel, Paul A. Continuity of the linear operator method for strict and weak measure topologies. 56 #3327
Novickiĭ, M. V. Integral representation of completely excessive elements. (Russian) 53 #842
Sario, Leo (*with* Wang, Cecilia Y.) Quasiharmonic functions on the Poincaré N-ball. 53 #5910
Quasiharmonic degeneracy of Riemannian N-manifolds. 53 #8459
(*with* Wang, Cecilia Y.) Harmonic L^p-functions on Riemannian manifolds. 54 #576
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Širokov, N. A. Some imbedding theorems for spaces of harmonic functions. (Russian. English summary) 58 #1205
Trân Dinh Trúc Ultrasuperharmonic functions associated with degenerate elliptic differential operators. 57 #12882
Walsh, B. *See* **Kwon, Young K.; et al.,** 49 #5385
Wang, Cecilia Y. Biharmonic Green's functions and quasiharmonic degeneracy. 53 #13606 (EA 54)
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Watanabe, Mineko Generalized normal derivatives of principal functions. 45 #3742
Zerner, Martin Une propriété des fonctions analytiques à valeurs dans les espaces de Sobolev. 49 #9238

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Anderson, J. M. (*with* Baernstein, Albert, II) The size of the set on which a meromorphic function is large. (58 #1153)
Avez, André Fonctions harmoniques positives sur les groupes abéliens. (55 #11328)
Baernstein, Albert, II *See* **Anderson, J. M.,** (58 #1153)
Baldi, Paolo Sur l'équation de Poisson. (English summary) (52 #4431)
Chow, Kwang Nan Minimality in families of solutions of $\Delta u = Pu$ on Riemann surfaces. (51 #8405)
Chung, Lung Ock *See* **Sario, Leo; et al.,** (58 #22612)
Debiard, Amédée (*with* Gaveau, Bernard) Potentiel fin et algèbres de fonctions analytiques. I. (52 #1326)
(*with* Gaveau, Bernard) Potentiel fin et algèbres de fonctions analytiques. II. (52 #1327)
Dellacherie, Claude ★Емкости и случайные процессы. (Russian) [Capacities and random processes] (56 #6811)
(Dynkin, E. B.) *See* **Dellacherie, Claude,** (56 #6811)
Gaveau, Bernard *See* **Debiard, Amédée,** (52 #1326) *and* **Debiard, Amédée,** (52 #1327)
Glasner, Shmuel On Choquet-Deny measures. (58 #7852)
Goldberg, Samuel Irving On the distance-decreasing property of a class of real harmonic mappings. (52 #11786)
Goodman, Victor Harmonic functions on Hilbert space. (51 #1979)
A Liouville theorem for abstract Wiener spaces. (48 #1329)
Graĭfer, L. B. Analogues of analytic differentials on manifolds of higher dimensions. (Russian) (57 #4203)
Gusman, S. Ja. Analogues of complex potential in a multidimensional space. (Russian) (53 #6647)
Hildebrandt, Stéfan (*with* Kaul, Helmut; Widman, Kjell-Ove) Dirichlet's boundary value problem for harmonic mappings of Riemannian manifolds. (53 #11662)
Janušauskas, Algimantas Mappings of three-dimensional domains that are realized by harmonic functions. (Russian) (54 #14017)
Kaul, Helmut *See* **Hildebrandt, Stéfan; et al.,** (53 #11662)
Kruškal′, S. L. Teichmüller spaces and Kleinian groups. (Russian) (54 #10597)
Kwon, Young K. Strict inclusion $0_{HB} < 0_{HD}$ for all dimensions. (49 #6090)
Lemaire, Luc Harmonic nonholomorphic maps from a surface to a sphere. (58 #18551)
Lin, I. (*with* Sario, Leo) HD-functions on Royden's compactification of a Riemannian space. (46 #9896)
Liu, Mu Chou Trivializations of orthogonal bundles. (53 #9209)
Lukeš, Jaroslav (*with* Zajíček, Luděk) The insertion of G_δ sets and fine topologies. (56 #5808)
Maitani, Fumio Boundary values and generalized normal derivatives of harmonic Dirichlet functions. (49 #570)
Masal′cev, L. A. An estimate of the growth of a harmonic function on a two-dimensional surface. (Russian) (58 #12857)
Mastrangelo-Dehen, Michèle Différentiabilité fine, différentiabilité stochastique, différentiabilité stochastique de fonctions finement harmoniques. (58 #7874)
Nakai, Mitsuru (*with* Sario, Leo) Existence of bounded Dirichlet finite biharmonic functions. (54 #10596)
Circle means of Green's functions. (51 #13217)
Canonical isomorphisms of energy finite solutions of $\Delta u = Pu$ on open Riemann surfaces. (52 #739)
See also **Sario, Leo; et al.,** (58 #22612)
Nemirovskiĭ, A. S. A remark regarding the definition of the harmonicity of functions Hilbert space. (Russian) (58 #30212)
Ow, Wellington H. Existence of positive and ϕ-bounded harmonic functions on Riemannian manifolds. (50 #1168)
Radó, Tibor ★On the problem of Plateau. (49 #9718)
Rassias, Themistocles M. Un contre-exemple à l'inégalité de Poincaré. (English summary) (55 #13483)
Raugi, Albert Fonctions harmoniques sur les groupes localement compacts à b dénombrable. (58 #24455)
Sakai, Mokoto On the vanishing of the span of a Riemann surface. (52 #3513)
Sario, Leo (*with* Nakai, Mitsuru; Wang, Cecilia Y.; Chung, Lung Ock) ★Classification theory of Riemannian manifolds. (58 #22612)
See also **Lin, I.,** (46 #9896) *and* **Nakai, Mitsuru,** (54 #10596)
Satō, Takeyoshi Integral representation of solutions of the equation $\Delta u = qu$ on Riemann surface. (Japanese summary) (55 #3239)
Schiff, Joel L. Nonnegative solutions of $\Delta u = Pu$ on open Riemann surfaces. (57 #16577)
(Šur, M. G.) *See* **Dellacherie, Claude,** (56 #6811)
Wang, Cecilia Y. *See* **Sario, Leo; et al.,** (58 #22612)
Widman, Kjell-Ove *See* **Hildebrandt, Stéfan; et al.,** (53 #11662)
Yau, Shing Tung Harmonic functions on complete Riemannian manifolds. (55 #40
Some function-theoretic properties of complete Riemannian manifold and th applications to geometry. (54 #5502)
Zajíček, Luděk *See* **Lukeš, Jaroslav,** (56 #5808)

31C10 Pluriharmonic and plurisubharmonic functions [See also 32F05

Fages, France Croissance maximale de certaines fonctions plurisousharmoniques positives. 45 #3738
Forelli, Frank Measures whose Poisson integrals are pluriharmonic. 49 #7468
Hada, Dennis A relation between two biharmonic Green's functions on Riemanni manifolds. 55 #3288
Muhlisov, F. G. The existence and uniqueness of the solution of a system of m-metaharmonic equations in an unbounded space. (Russian) 56 #645
Pčelin, B. K. On the theory of almost everywhere polyharmonic functions. (Russia 56 #646
A sufficient condition for a function to be polyharmonic when it is continuo (Russian) 56 #647
Sario, Leo Biharmonic measure. 56 #12292

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Favorov, S. Ju. Functions of class B, and their application in the theory of meromorp functions of several variables. I, II. (Russian) (58 #17176)
Forelli, Frank Pluriharmonicity in terms of harmonic slices. (57 #16689)
Gusman, S. Ja. A boundary value problem for differential forms of the class $_1$ (Russian) (57 #4204)
Laville, Guy Fonctions pluriharmoniques et solution fondamentale d'un opérateur du ordre. (English summary) (57 #16690)
Lelong, Pierre Recent results on analytic mappings and plurisubharmonic functions topological linear spaces. (46 #7894)
Malliavin, Paul *See* **Malliavin-Brameret, Marie-Paule,** (58 #17219)
Malliavin-Brameret, Marie-Paule (*with* Malliavin, Paul) Intégrales de volume pour applications pseudo-conformes du bidisque. (English summary) (58 #17219)
Nakai, Mitsuru Order comparisons on canonical isomorphisms. (48 #2375)
Rudin, Walter Pluriharmonic functions in balls. (54 #10673)
Sario, Leo Completeness and existence of bounded biharmonic functions on a Riemannian manifold. (50 #5688)
Schopf, Gerhard The dependence of the hypersurfaces of associated types for systems associated orders on the choice of the associated orders. (Russian) (51 #5957)
Stoll, Manfred Integral formulae for pluriharmonic functions on bounded symmet domains. (49 #3212)

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Bliedtner, Jürgen Dirichlet forms on regular functional spaces. 53 #3334
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Debiard, Amédée (*with* Gaveau, Bernard) Potentiel fin et algèbres de fonctions analytiques. 50 #2533
Dellacherie, Claude Ensembles minces associés à une capacité. 45 #3744
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Forst, Gunnar Familles résolvantes de mesures. 57 #16641
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Glasner, Moses Comparison theorems for bounded solutions of $\triangle u = Pu$. 51 #1326
Graĭfer, L. B. (*with* Gusman, S. Ja.) Properties of certain classes of differential form Riemannian spaces. (Russian) 58 #1206
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Havin, V. P. *See* **Maz′ja, V. G.,** 53 #13610
Higuti, Isao On the transitive domination principle for continuous function-kern 51 #8445

Hirsch, Francis Familles d'opérateurs potentiels. (English summary) **53** #5911

Hornung, U. Die approximative Lösung einer Klasse von Approximationsaufgaben. (See Zbl **251** #31008; MR **49** #10503)

mai, Hideo Sario potentials on Riemannian spaces. **54** #5485

sakov, V. M. Uniqueness theorems for the inverse problem of potential theory. (Russian) **58** #17165

tô, Masayuki Sur une famille sous-ordonnée au noyau de convolution de Hunt donné. **48** #4336

Une caractérisation sur le principe relatif de domination pour les noyaux de Riesz-Frostman. **48** #4337

Sur les noyaux de convolution conditionnellement sous-medians. **55** #8390

to, Yoshifusa Sur la transformation homogène du noyau de Dirichlet. **45** #7090

Kapanadze, Dž. V. Riesz potentials and the Cartan topology. (Russian. Georgian and English summaries) **45** #5396

Lawrynowicz, Julian Capacities as conformal quasi-invariants on pseudo-Riemannian manifolds. **51** #13263

Mahmud-zade, R. A. Necessary and sufficient conditions for the action of the operator of logarithmic potential in H_ω. (Russian. Azerbaijani summary) **54** #577

Matzeu, Michele Sistemi di complementarità e approssimazione delle capacità relative a operatori ellittici del secondo ordine. (English summary) **51** #13264

Maz'ja, V. G. (*with* Havin, V. P.) A nonlinear potential theory. (Russian) **53** #13610

Mizuta, Yoshihiro Integral representations of Beppo Levi functions of higher order. **50** #2534

Mokobodzki, Gabriel Noyaux absolument mesurables ou basiques et opérateurs nucléaires. **53** #8460

Preston, Christopher J. A theory of capacities and its application to some convergence results. **50** #630

Rempel, Stephan Zur Frage der Vollständigkeit der energetischen Räume für Denykerne. **58** #22624

Ridder, J. Duale Verhältnisse bei regulären äuszeren und regulären inneren H-Kapazitäten. **50** #631

Spezielle Beispiele für äussere und innere Kapazitäten (im Sinne von Choquet). **55** #10709

Ritter, Gunter Famille résolvante associée à des opérateurs ne vérifiant pas le principe du maximum. **57** #9997

Roth, Jean-Pierre Semi-groupes invariants sur un espace homogène. **57** #16642

Schulze, Bert-Wolfgang Nullmengensysteme in der Potentialtheorie. **46** #9372

Sjödin, Tord Bessel potentials and extension of continuous functions on compact sets. **53** #843

Taylor, John C. On Deny's characterization of the potential kernel for a convolution Feller semi-group. (French summary) **53** #5912

Wang, Cecilia Y. Biharmonic Green's functions and biharmonic degeneracy. **52** #11090

Zó, Felipe J. (*with* Borghi, Osvaldo) On Choquet's theorem on capacities. (Spanish) **58** #28566

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Adams, David R. Traces of potentials. II. (**47** #2337)

On the exceptional sets for spaces of potentials. (**50** #10800)

Adams, R. D. (*with* Aronszajn, Nachman; Hanna, M. S.) Theory of Bessel potentials. Part III. Potentials on regular manifolds. (French summary) (**54** #915)

Anger, Bernd Approximation of capacities by measures. (**53** #745)

Aronszajn, Nachman *See* **Adams, R. D.; et al.**, (**54** #915)

Atahodžaev, M. A. Inverse problems of the theory of generalized parabolic potentials. (Russian) (**56** #16178)

Avez, André Théorème de Choquet-Deny pour les groupes à croissance non exponentielle. (**50** #5888)

Calvert, Bruce D. Potential theoretic properties for monotone operators. (Italian summary) (**46** #9812)

Chung, Kai Lai Remarks on equilibrium potential and energy. (French summary) (**53** #9393)

Dellacherie, Claude Espaces pavés et rabotages. (**51** #8359)

★Capacités et processus stochastiques. (**56** #6810)

(*with* Meyer, Paul-André) ★Probabilités et potentiel. (**58** #7757)

Federer, Herbert Slices and potentials. (**45** #7025)

Feyel, Denis Un théorème ergodique maximal en théorie du potentiel. (English summary) (**55** #619)

Hanna, M. S. *See* **Adams, R. D.; et al.**, (**54** #915)

Harvey, Reese (*with* Polking, John C.) A notion of capacity which characterizes removable singularities. (**46** #5862)

Hedberg, Lars Inge Approximation in the mean by solutions of elliptic equations. (**47** #633)

Itô, Masayuki Sur le balayage relatif aux noyaux composés. (**47** #820)

Ławrynowicz, Julian Electromagnetic field and the theory of conformal and biholomorphic invariants. (**58** #1270)

Lewis, John L. Capacitary functions in convex rings. (**57** #16638)

Lumer, Gunter Images numériques, principe du maximum généralisé, et résolvantes. (**56** #12927)

Maitani, Fumio Boundary behavior of harmonic measures. (**51** #13253)

Maz'ja, V. G. A certain embedding operator, and set functions of the type of (p,l)-capacity. (Russian) (**47** #5582)

Meyer, Paul-André *See* **Dellacherie, Claude**, (**58** #7757)

Nakai, Mitsuru Uniform densities on hyperbolic Riemann surfaces. (**50** #4934)

Polking, John C. Approximation in L^p by solutions of elliptic partial differential equations. (**48** #2567)

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Ridder, J. Beispiele von Choquet'schen Kapazitäten aus der Theorie der Carathéodory'schen Maße. (**52** #14208)

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Samko, S. G. Spaces of Riesz potentials. (Russian) (**56** #1057)

Schulze, Bert-Wolfgang (*with* Wildenhain, Günther) Die Rolle des Balayage-Prinzips in der Theorie der Differentialgleichungen. (**47** #7196)

Ein Balayage-Prinzip für korrekte Randwert-Probleme. I. (**49** #11226)

(*with* Wildenhain, Günther) Potentialtheorie für stark elliptische Systeme höherer Ordung. (**56** #3461)

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Capacités invariantes: le cas alterné. (English summary) (**55** #604)

Veselý, Jiří Some properties of a generalized heat potential. (**50** #7815)

Wildenhain, Günther ★Potentialtheorie linearer elliptischer Differentialgleichungen beliebiger Ordnung. (**48** #11762)

See also **Schulze, Bert-Wolfgang**, (**47** #7196) *and* **Schulze, Bert-Wolfgang**, (**56** #3461)

31C20 Discrete potential theory and numerical methods

Secondary classifications:

Abrahamsen, P. *See* **Harrington, Roger F.; et al.**, (**46** #6634)

Albertsen, N. C. *See* **Harrington, Roger F.; et al.**, (**46** #6634)

Čumakov, S. A. *See* **Fuksman, N. A.**, (**49** #9223)

Fuksman, N. A. (*with* Čumakov, S. A.) Cauchy's formula and theorem for (p,q)-analytic functions of a discrete argument. (Russian. Uzbek summary) (**49** #9223)

Harrington, Roger F. (*with* Pontoppidan, K.; Abrahamsen, P.; Albertsen, N. C.) Computation of Laplacian potentials by an equivalent-source method. (**46** #6634)

Klunnik, O. O. *See* **Makarov, V. L.**, (**51** #9533)

Makarov, V. L. (*with* Klunnik, O. O.) The solution of boundary value problems of the theory of generalized axially symmetric potential in discrete formulation. (Russian. English summary) (**51** #9533)

Mastin, C. Wayne Convergence and applications of reproducing kernels for classes of discrete harmonic functions. (**51** #9534)

Pontoppidan, K. *See* **Harrington, Roger F.; et al.**, (**46** #6634)

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(*with* de la Pradelle, Arnaud) Le rôle des espaces de Sobolev en topologie fine. **58** #28568

(*with* de la Pradelle, Arnaud) Régularisation de noyaux-fonctions symétriques. **55** #694

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(*with* de la Pradelle, Arnaud) Construction d'un espace harmonique de Brelot associé à un espace de Dirichlet de type local vérifiant une hypothèse d'hypoellipticité. **58** #17168

Forst, Gunnar Symmetric harmonic groups and translation invariant Dirichlet spaces. **48** #551

A characterization of non-symmetric translation invariant Dirichlet forms. **50** #10292

Convolution semigroups of local type. **50** #7562

The definition of energy in non-symmetric translation invariant Dirichlet spaces. **55** #10710

Harmonic spaces associated with non-symmetric translation invariant Dirichlet forms. **54** #7821

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Fowler, Peter A. Potential theory in Banach spaces of functions, a condensor theorem. **55** #8391

Capacity theory in Banach spaces. **53** #844

Haraux, Alain How to differentiate the projection on a convex set in Hilbert space. Some applications to variational inequalities. **58** #1207

Isac, George Structures variationnelles sur les espaces de Dirichlet. **54** #13103

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Sur les noyaux d'ordre fractionnaire associés au noyau de Dirichlet. **53** #13612

Sur les noyaux de Dirichlet continus. **47** #8892

Sur l'existence et la non-existence des algèbres de Dirichlet. **47** #8893

Noyaux réguliers et noyaux singuliers. **49** #3178

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Sur les noyaux de Frostman-Kunugui et les noyaux de Dirichlet. (English

summary) **57** #6476

Kori, Tosiaki Sur une classe des solutions du problème de Dirichlet extérieur dans un espace harmonique de Brelot. **58** #28569

Kurokawa, Takahide Balayage, capacity and a duality theorem in Dirichlet spaces. **57** #672

Le Jan, Yves Mesures associées à une forme de Dirichlet. **58** #28570

de la Pradelle, Arnaud *See* **Feyel, Denis, 53** #13611; **Feyel, Denis, 54** #7820; **Feyel, Denis, 55** #694; **Feyel, Denis, 58** #17168; **Feyel, Denis, 58** #22625 *and* **Feyel, Denis, 58** #28568

Roth, Jean-Pierre Formule de représentation et troncature des formes de Dirichlet sur $\mathbf{R}^m$. **58** #28571

Secondary classifications:

Albeverio, Sergio A. (*with* Høegh-Krohn, Raphael J.) Dirichlet forms and diffusion processes on rigged Hilbert spaces. (**56** #13373)

Ancona, Alano Continuité des contractions dans les espaces de Dirichlet. (English summary) (**54** #3381)

Berg, Christian Suites définies négatives et espaces de Dirichlet sur la sphère. (**45** #870)

Bliedtner, Jürgen Dirichlet forms on regular functional spaces. (**53** #3334)
Functional spaces and their exceptional sets. (**53** #3335)

Carrillo-Menendez, Santiago Espaces de Dirichlet réguliers et processus de Markov. (**50** #14954)

Conze, Jean-Pierre *See* **Guivarc'h, Yves,** (**53** #3600)

Elliott, Joanne Dirichlet spaces and boundary conditions for submarkovian resolvents. (**55** #9288)

Feyel, Denis (*with* de la Pradelle, Arnaud) Processus associés à une classe d'espaces de Banach fonctionnels. (**58** #18747)

Fukushima, Masatoshi On the generation of Markov processes by symmetric forms. (**58** #13371)
On an L^p-estimate of resolvents of Markov processes. (**58** #13373)

Guivarc'h, Yves (*with* Conze, Jean-Pierre) Propriété de droite fixe et fonctions harmoniques positives. (**53** #3600)

Høegh-Krohn, Raphael J. *See* **Albeverio, Sergio A.,** (**56** #13373)

Kori, Tosiaki Neumann problem on a symmetric Brelot's harmonic space. (**58** #11475)

McKenna, P. J. Discrete Carleson measures and some interpolation problems. (**58** #1163)

de la Pradelle, Arnaud *See* **Feyel, Denis,** (**58** #18747)

Rao, Murali On a result of M. Kanda. (**57** #7785)

Silverstein, Martin L. The sector condition implies that semipolar sets are quasi-polar. (**57** #7784)

Yor, Marc Une remarque sur les formes de Dirichlet et les semi-martingales. (**58** #31396)

31C99 None of the above, but in this section

Ancona, Alano Contraction module et principe de réduite dans les espaces ordonnés à forme coercive. **49** #5386

Arsove, Maynard (*with* Leutwiler, Heinz) Infinitesimal generators and quasi-units in potential theory. **52** #8466

Čumakov, S. A. *See* **Fuksman, N. A., 45** #7326

Deny, Jacques Développements récents de la théorie du potentiel (travaux de Jacques Faraut et de Francis Hirsch). **54** #7822

Faraut, Jacques Semi-groupes de Feller invariants sur les espaces homogènes non moyennables. **53** #845
See also **Deny, Jacques, 54** #7822

Feyel, Denis (*with* de la Pradelle, Arnaud) Quelques propriétés de la réduite dans les préfaisceaux maximaux. **45** #5400

Forst, Gunnar On a theorem of M. Ito. (French summary) **58** #1208

Fuksman, N. A. (*with* Čumakov, S. A.) Methods of solution of equations of (p,q)-harmonicity for functions of a discrete argument. (Russian) **45** #7326

Higuti, Isao (*with* Itô, Masayuki) Characterization of relative domination principle. **49** #614
Duality of domination principle for non-symmetric lower semi-continuous function-kernels. **52** #8467

(Hirsch, Francis) *See* **Deny, Jacques, 54** #7822

Itô, Masayuki Noyaux de convolution réguliers et noyaux de convolution singuliers. **45** #5398
Sur le principe de domination pour les noyaux de convolution. **49** #615
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Sur l'équation $N^n = N$ pour un noyau de convolution N. **58** #11470
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Kayano, Takasi (*with* Ogawa, Shirô) On a characterization of a potential theoretic measure. **45** #580

Kishi, Masanori Positive idempotents on a locally compact abelian group. **53** #5913

Leutwiler, Heinz *See* **Arsove, Maynard, 52** #8466

Lin, I. (*with* Sario, Leo) Green's lines on Royden's compactification of a Riemannian space. **58** #11471

McDonald, John N. Maximal measures and abstract Dirichlet problems. **45** #578

Mokobodzki, Gabriel Éléments extrémaux pour le balayage. **45** #581
Pseudo-quotient de deux mesures par rapport à un cône de potentiels. Application à la dualité. **53** #5914a
Pseudo-quotient de deux mesures, application à la dualité. **53** #5914b

Nakai, Mitsuru (*with* Sario, Leo) A nonexistence test for biharmonic Green's functio of clamped bodies. **56** #3330

Ogawa, Shirô *See* **Kayano, Takasi, 45** #580

Ohtsuka, Makoto A remark on duality of domination principle. **52** #8468

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Sario, Leo (*with* Wang, Cecilia Y.) Negative quasiharmonic functions. **49** #9239
See also **Nakai, Mitsuru, 56** #3330 *and* **Lin, I., 58** #11471

Taylor, John C. Le compactifié de Martin d'un domaine lipschitzien borné dans R **54** #2999
On the Martin compactification of a bounded Lipschitz domain in a Riemannia manifold. (French summary) **58** #6302

Wang, Cecilia Y. *See* **Sario, Leo, 49** #9239

Watanabe, Hisako Balayages of measures and dilations on locally compact space **47** #5283

Secondary classifications:

Adams, David R. (*with* Bagby, Richard J.) Translation-dilation invariant estimates fo Riesz potentials. (**50** #969)

Altomare, Francesco Proiettori positivi, famiglie risolventi e problema di Dirichlet (English summary) (**58** #30099)

Bagby, Richard J. *See* **Adams, David R.,** (**50** #969)

Bronner, François Principe du maximum et résolvantes sous-markoviennes. (**48** #5192

Duffin, Richard J. Hilbert transforms in Yukawan potential theory. (**48** #9290)

Faraut, Jacques Semi-groupes de Feller invariants sur les espaces hyperboliques. (**54** #5750)

Furstenberg, Harry Boundaries of Riemannian symmetric spaces. (**55** #10969)

Hirsch, Francis Intégrales de résolvantes. (**45** #4208)
(*with* Roth, Jean-Pierre) Opérateurs dissipatifs et codissipatifs invariants sur u espace homogène. (**51** #3960)

Itô, Masayuki Remarque sur la somme des résolvantes. (**45** #5666)

Kwon, Young K. (*with* Sario, Leo) A maximum principle for bounded harmonic functions on Riemannian spaces. (**54** #13780a)
(*with* Sario, Leo) A maximum principle for Direchlet-finite harmonic function on Riemannian spaces. (**54** #13780b)

(Loomis, L. H.) *See* **Valadier, Michel,** (**58** #23504)

Meyers, Norman G. Taylor expansion of Bessel potentials. (**50** #980)

Nakai, Mitsuru (*with* Sario, Leo) Existence of Dirichlet finite biharmonic functions (**54** #13781)

Roth, Jean-Pierre *See* **Hirsch, Francis,** (**51** #3960)

Sario, Leo (*with* Wang, Cecilia Y.) Riemannian manifolds of dimension $N > 4$ withou bounded biharmonic functions. (**54** #13784)
See also **Kwon, Young K.,** (**54** #13780a); **Kwon, Young K.,** (**54** #13780b) *an* **Nakai, Mitsuru,** (**54** #13781)

Valadier, Michel À propos d'un article de L. H. Loomis: "Dilations and extrema measures" (Adv. in Math. **17** (1975), 1–13). (**58** #23504)

Wang, Cecilia Y. *See* **Sario, Leo,** (**54** #13784)

Wildenhain, Günther Einige Bemerkungen zum Fortsetzungssatz von H. Whitney. (**49** #9622)

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Anandam, I. Victor Espaces harmoniques sans potentiel positif. (English summary **50** #2536
Formule de Green et balayage. **46** #3822
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Pseudo-potentiels dans un espace harmonique sans potentiel positif. **57** #673
On non-admissible subharmonic functions. **58** #17169

Armstrong, Thomas E. Topological countability in Brelot potential theory. (Frenc summary) **50** #13580

Arsove, Maynard (*with* Leutwiler, Heinz) Potentialtheoretic semigroups. **56** #3331

Barth, Thomas Représentation intégrale des fonctions surharmoniques au moyen de réduites. **54** #10636

(Bauer, Heinz) *See* **Guillerme, Jean, 58** #11474

Bauermann, Udo Balayage-Operatoren in der Potentialtheorie. **58** #11472

Berg, Christian Fonctions harmoniques sur T^∞. (English summary) **52** #6004
Potential theory on the infinite dimensional torus. **53** #5915
On Brownian and Poissonian convolution semigroups on the infinite dimension torus. **55** #10711

Bertin, Émile M. J. Espaces harmoniques généralisées. I. Liasses de fonctions. **45** #5399
See also **Mastrangelo-Dehen, Michèle, 54** #10639

Bliedtner, Jürgen (*with* Janssen, Klaus) Harnacksche Kegel und Metrik in harmonischen Räumen. **48** #8824
(*with* Janssen, Klaus) A generalization of H. Bauer's minimum principle. **51** #912
(*with* Hansen, Wolfhard) Simplexes et espaces harmoniques. **49** #5388
(*with* Hansen, Wolfhard) Cônes de fonctions surharmoniques. Caractérisation d la frontière de Choquet. **49** #9240
(*with* Hansen, Wolfhard) Simplicial cones in potential theory. **52** #8470
(*with* Hansen, Wolfhard) A simplicial characterization of elliptic harmonic spaces. **53** #13614
(*with* Hansen, Wolfhard) Cones of hyperharmonic functions. **57** #16643
(*with* Hansen, Wolfhard) Simplicial cones in potential theory. II. Approximatio theorems. **58** #11473

Boboc, Nicu (*with* Cornea, Aurel) Cônes convexes ordonnés. Représentations intégrale **49** #7469

(*with* Mustaţă, P.) Considérations axiomatiques sur les fonctions poly-surharmoniques. **45** #7093

(*with* Bucur, Gheorghe; Cornea, Aurel) Cones of potentials on topological spaces. **50** #632

(*with* Mustaţă, P.) Fonctions poly-surharmoniques associées aux opérateurs différentiels linéaires. **53** #846

(*with* Bucur, Gheorghe; Cornea, Aurel) *H*-cones and potential theory. (French summary) **53** #8464

(*with* Nkomba-Tshola, M.-M.) Éléments complètement excessifs par rapport à une résolvante. **58** #6303

relot, Marcel ★О топологиях и границах в теории потенциала. (Russian) [Topologies and boundaries in potential theory] **50** #633

Quelques recherches sur l'allure à la frontière des fonctions harmoniques. **52** #6005

Remarques sur les zéros à la frontière des fonctions harmoniques positives. (Italian summary) **54** #7823

ucur, Gheorghe *See* **Boboc, Nicu; et al.**, **50** #632 *and* **Boboc, Nicu; et al.**, **53** #8464

aballero, Emilia (*with* Guillerme, Jean) Majorantes surharmoniques minimales d'une fonction continue, en théorie axiomatique. **48** #6456

Fonctions indifférentes, en théorie axiomatique. **51** #13265

(*with* Guillerme, Jean) Sur un balayage intérieur et les ensembles intérieurement effilés, en théorie axiomatique. **53** #5916

onstantinescu, Corneliu Weak completeness of the cone of positive superharmonic functions on a harmonic space. **54** #3001

Le problème de Dirichlet pour des systèmes d'équations non-linéaires. **56** #8882

ornea, Aurel (*with* Licea, Gabriela) ★Order and potential resolvent families of kernels. **57** #6477

See also **Boboc, Nicu**, **49** #7469; **Boboc, Nicu; et al.**, **50** #632 *and* **Boboc, Nicu; et al.**, **53** #8464

ebs, Gabriel Cônes simpliciaux en théorie du potentiel. **57** #12883

urier, Roland Sur les noyaux-fonctions en théorie du potentiel. **47** #2085

eyel, Denis (*with* de la Pradelle, Arnaud) Principe du minimum et préfaisceau maximaux. **53** #8465

(*with* de la Pradelle, Arnaud) Principe du minimum et préfaisceaux maximaux. **51** #3489

(*with* de la Pradelle, Arnaud) Application du principe du minimum et de la maximalité à l'étude d'un opérateur elliptique du second ordre. **52** #3570

Étude de sursolutions faibles d'un opérateur elliptique du second ordre à coefficients discontinus. **52** #3571

(*with* de la Pradelle, Arnaud) Espaces localement compacts associés aux fonctions hyperharmoniques de la théorie de B. Fuglede. **51** #8446

Axiomatique de Brelot associée à un espace de Dirichlet. (English summary) **52** #11091

(*with* de la Pradelle, Arnaud) Construction du faisceau adjoint à un préfaisceau maximal vérifiant un axiome de convergence fort. (English summary) **53** #5917

(*with* de la Pradelle, Arnaud) Cônes en dualité. Applications aux fonctions de Green. **58** #28565

(*with* de la Pradelle, Arnaud) Faisceaux maximaux de fonctions associées à un opérateur elliptique du second ordre. (English summary) **55** #12937

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uglede, Bent Fine connectivity and finely harmonic functions. **54** #10637

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Sur la fonction de Green pour un domaine fin. (English summary) **55** #3289

Finely harmonic mappings and finely holomorphic functions. **57** #9998

Gauthier, Paul M. (*with* Goldstein, Myron) From local to global properties of subharmonic functions on Green spaces. **57** #6478

Goldstein, Myron *See* **Gauthier, Paul M.**, **57** #6478

Gowrisankaran, Kohur Iterated fine limits and iterated nontangential limits. **47** #489

Integral representation for a class of multiply superharmonic functions. (French summary) **49** #616

Multiply superharmonic functions. (French summary) **53** #5918

Guessous, Hassan Ouverts 𝔓-harmoniques et problème de Dirichlet. (English summary) **55** #696

Prolongement surharmonique associé à un couple semi-normal. Applications aux espaces 𝔓-harmoniques. (English summary) **56** #5918

Guillerme, Jean Espaces harmoniques et processus de Markov. **58** #11474

Balayage dans un espace harmonique sans potentiel positif. (English summary) **54** #7824

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Abbildungen harmonischer Räume mit Anwendung auf die Laplace und Wärmeleitungsgleichung. (French and English summaries) **49** #617

Fegen und Dünnheit mit Anwendungen auf die Laplace- und Wärmeleitungsgleichung. (English and French summaries) **54** #3002

Hunt's theorem and axiomatic potential theory. **46** #2070

Potentialtheorie semi-regulärer harmonischer Kerne. **45** #8870

Perturbation of harmonic spaces and construction of semigroups. **52** #6006

Cones simpliciaux de fonctions surharmoniques. **56** #12293

Some remarks on strict potentials. **53** #5919

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Hervé, Michel *See* **Hervé, Rose-Marie**, **51** #13266

Hervé, Rose-Marie (*with* Hervé, Michel) Les fonctions surharmoniques dans l'axiomatique de M. Brelot associées à un opérateur elliptique dégénéré. (English summary). **51** #13266

Quelques propriétés du faisceau de fonctions harmoniques associé à un opérateur elliptique dégénéré. (English summary) **54** #7825

Higuti, Isao (*with* Itô, Masayuki) On the theorem of Kishi for a continuous function-kernel. **50** #2537

Hyvönen, Jaakko On resolutive compactifications of harmonic spaces. **54** #7826

Ikegami, Teruo On the boundary behaviour of harmonic maps. **48** #8826

Theorems of Riesz type on the boundary behaviour of harmonic maps. **49** #9242

On the characterization of harmonic map of type Bl at the Martin boundary points of a harmonic space. **53** #13615

On the regularity of boundary points in a resolutive compactification of a harmonic space. **56** #3332

Itô, Masayuki Sur les principes divers du maximum et le type positif. **46** #5657

Remarque sur les noyaux de convolution associé à résolvante. **46** #3823

Une caractérisation du principe du balayage pour un espace fonctionnel régulier. **47** #2086

See also **Higuti, Isao**, **50** #2537

Janssen, Klaus On the existence of a Green function for harmonic spaces. **50** #2538

(*with* Nguyen-Xuan-Loc) On the balayage of Green functions on finely open sets. **52** #782

A co-fine domination principle for harmonic spaces. **51** #915

See also **Bliedtner, Jürgen**, **48** #8824 *and* **Bliedtner, Jürgen**, **51** #912

Jones, B. Frank, Jr. (*with* Kemper, John T.) The local character of kernel functions in axiomatic potential theory. **51** #8447

Kayano, Takasi On the equivalences of the axiomatic systems of the harmonic spaces. **46** #9373

Kemper, John T. *See* **Jones, B. Frank, Jr.**, **51** #8447

Kenmochi, Nobuyuki (*with* Mizuta, Yoshihiro) The gradient of a convex function on a regular functional space and its potential theoretic properties. **50** #13581

Kishi, Masanori Puissance fractionnaire d'un noyau positif dont le carré est encore un noyau. **46** #5658

Kori, Tosiaki Sheaf cohomology theory on harmonic spaces. **57** #16644

Neumann problem on a symmetric Brelot's harmonic space. **58** #11475

Problème de Neumann sur les espaces harmoniques. **55** #8388

Král, Josef (*with* Lukeš, Jaroslav; Netuka, Ivan) Elliptic points in one-dimensional harmonic spaces. **45** #584

(*with* Lukeš, Jaroslav) Indefinite harmonic continuation. (Czech summary) **47** #8894

(*with* Lukeš, Jaroslav) Brelot spaces on one-dimensional manifolds. (Czech. English summary) **51** #5952

Kubo, Tadao *See* **Murazawa, Tadashi**, **50** #4994

Kwon, Young K. Royden compactifiction of harmonic spaces. **46** #5659

Laine, Ilpo Covering properties of harmonic Bl-mappings. II. **52** #14341

Covering properties of harmonic Bl-mappings. I. **49** #3179

Covering properties of harmonic *B*l-mappings. III. **54** #3003

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Séminaire:

Pierre Lelong (Analyse) ★Séminaire Pierre Lelong (Analyse). Année 1967–1968. (50 #6728)

★Séminaire Pierre Lelong (Analyse). Année 1969. (50 #6729)

★Séminaire Pierre Lelong (Analyse). Année 1970. (50 #6730)

★Séminaire Pierre Lelong (Analyse). Année 1970–1971. (50 #6731)

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(*with* Kostovs'kiĭ, O. M.; Čulik, Ī. Ī.) Determination of the domain of convergence of the power series of a function of two complex variables. (Russian.

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Avazašvili, N. D. A certain theorem of P. Rusev. (Russian. Georgian summary) (**47** #677)

Čkonija, G. I. Summability by the Cesàro method of the double power series of a function of class H_δ on the distinguished boundary of the unit bicylinder ($\delta < 1$). (Russian. Georgian summary) (**46** #579)

Dinghas, Alexander On distortion theorems in classical domains of several complex variables. (Romanian summary) (**46** #7539)

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Hornich, Hans Eine partielle Differentialgleichung in Zusammenhang mit den schlichten Funktionen. (**46** #2029)

Odoni, R. W. K. On the norms of algebraic integers. (**54** #12715)

Radlow, James Ideals of square summable power series in several variables. (**47** #816)

Remmert, Reinhold *See* **Grauert, Hans**, (**47** #5290)

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Sankaran, N. Rings of formal power series. (**47** #1805)

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C^k and analytic equivalence of complex analytic varieties. (**55** #3305)

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Katz, Getulio Domains of existence in infinite dimension. **57** #3444

Litvinjuk, V. A. "Moving" domains of analyticity of integrals of Temljakov type of the first kind with unbounded complete doubly circular defining domain. (Russian) **58** #28660

Łubczonok, Grzegorz *See* **Chmielowski, Jan, 56** #3345

Mihaĭlova, T. S. The separation of the singularities of functions that are holomorphic everywhere in C^2 with the exception of the set of zeros of a polynomial. (Russian) **49** #3205

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Oeljeklaus, Helmut Über die Automorphismengruppe von Ellipsoiden. **48** #2421

Pflug, Rolf Peter Über polynomiale Funktionen auf Holomorphiegebieten. **50** #7579

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Pinčuk, S. I. The existence of holomorphic primitives. (Russian) **46** #2083

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A new class of domains of holomorphy. II. Domains of holomorphy on a three dimensional Stein space with an isolated singularity. **58** #6339b

Taylor, B. Alan *See* **Bedford, Eric, 56** #15979

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Chmielowski, Jan Théorèmes d'identité en dimension infinie. (**57** #1539)

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Kajiwara, Joji (*with* Watanabe, Kiyoshi) Domain with a vanishing cohomology set in two dimensional complex projective space. (**58** #1258)

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(*with* Watanabe, Kiyoshi) Extension of Cartan-Behnke-Stein's theorem for a product of two Riemann surfaces. (**58** #1260)

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Latyšev, A. V. The behavior of certain integrals outside a domain of holomorphy. (Russian) (**58** #28614)

Lelong, Pierre Fonctions analytiques et fonctions plurisousharmoniques dans les espaces vectoriels topologiques. (**46** #7559)

Noverraz, Philippe Pseudo-convexité et base de Schauder dans les E. L. C. (**53** #11373)

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Rickart, C. E. Holomorphic extensions and domains of holomorphy for general function algebras. (**52** #15018)

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Zerner, Martin Domaines d'holomorphie des fonctions vérifiant une équation dérivées partielles. (**55** #5995)

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Sibony, Nessim Prolongement analytique des fonctions holomorphes bornées. (**51** #13286)

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32D15 Continuation of analytic objects

Adachi, Kenzō (*with* Suzuki, Masayuki; Yoshida, Masaaki) Continuation of holomorphic mappings, with values in a complex Lie group. **50** #5013

Agranovič, P. Z. (*with* Ronkin, L. I.) The continuation of inner functions in t polydisc. (Russian) **49** #3207

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Andronikof, Emmanuel Valeurs au bord de fonctions holomorphes se recollant loin d réel. (English summary) **51** #10688

Aupetit, Bernard H. Une généralisation du théorème d'extension de Radó. (Englis summary) **57** #6501

Badji, Chérif Sur l'extension des formes différentielles du bord d'une variété kahlérienn **54** #7848

Barsky, Daniel Prolongement analytique p-adique effectif. **53** #8486

Prolongement analytique p-adique effectif. **53** #8487

Bartenwerfer, Wolfgang Die Fortsetzung holomorpher und meromorpher Funktionen eine k-holomorphe Hyperfläche hinein. **53** #5935

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Bedford, Eric A short proof of the classical edge of the wedge theorem. **50** #10318

Holomorphic continuation at a totally real edge. **56** #15980

Holomorphic continuation of smooth functions over Levi-flat hypersurface **58** #1246

Beurling, Arne Analytic continuation across a linear boundary. **52** #14368

Björk, Jan-Erik On extensions of holomorphic functions satisfying a polynomial growt condition on algebraic varieties in $\mathbf{C}^n$. (French summary) **51** #928

Bros, Jacques (*with* Epstein, H.; Glaser, V.; Stora, R.) Quelques aspects globaux des problèmes d'edge-of-the-wedge. **54** #7849

Cerezo, André (*with* Hirschowitz, André) Quelques remarques concernant le prolongement des applications analytiques. **50** #13599

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Christol, Gilles Éléments algébriques. **53** #3350

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Coeuré, Gérard Prolongement analytique. **54** #7850

Cover, Alan S. Generalized continuation. **47** #3708

Downarowicz, Małgorzata Analytic continuation of series of homogeneous polynomials of *n* complex variables. **54** #7851

Analytic continuation of series of homogeneous polynomials in topological vector spaces. **58** #17199

Drużkowski, Ludwik M. Extension of separately analytic functions defined on a cross in the space $\mathbf{C}^n$. **56** #665

Epstein, H. *See* **Bros, Jacques; et al.,** **54** #7849

Escassut, Alain Algèbres de Banach ultramétriques, algèbres de Krasner et algèbres de Krasner-Tate. **51** #8461

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Sadullaev, A. Continuation of analytic sets. (Russian) **55** #5893

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Shiffman, Bernard Extension of positive line bundles and meromorphic maps. **51** #10689

Sibony, Nessim Prolongement analytique des fonctions holomorphes bornées. **47** #7062

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Stout, Edgar Lee Bounded extensions. The case of discs in polydiscs. **58** #28662

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Wavrik, John J. Deforming cohomology classes. **48** #4348

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(*with* Stănăşilă, Octavian) ★Algebraic methods in the global theory of complex spaces. (**57** #3420)

Baryton, Serge Fonctions *A*-analytiques. (**47** #3711)

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Bony, Jean-Michel (*with* Schapira, Pierre) Existence et prolongement des solutions holomorphes des équations aux dérivées partielles. (**53** #979)

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Frisch, J. Prolongement de faisceaux analytiques cohérents. (**55** #3303)

Harita, Mitsuru Continuation of meromorphic functions in a domain of the Cartesian product of denumerable family of complex planes. (**52** #6419)

Hlawka, Edmund Numerische analytische Fortsetzung in Polyzylindern. (**57** #18045)

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Kawai, Takahiro Extension of hyperfunction solutions of linear differential equations with constant coefficients. (**54** #11405)

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Langmann, Klaus (*with* Lütkebohmert, Werner) ★Cousinverteilungen und Fortsetzungssätze. (**51** #3511)

Verallgemeinerung eines Satzes von H. Cartan. (**57** #6494)

Lütkebohmert, Werner Lückengarben kohärenter Untergarben in der nichtarchimedischen Funktionentheorie. (**50** #13591)

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Mazet, Pierre Définition d'une application universelle sur un espace analytique en dimension finie. (**54** #13145)

Nirenberg, L. A certain problem of Hans Lewy. (Russian) (**58** #11823)

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Pinčuk, S. I. Analytic continuation of mappings along strictly pseudo-convex hypersurfaces. (Russian) (**58** #1261)

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Robba, Philippe Prolongement des solutions d'une équation différentielle p-adique. (**50** #2136)

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Seabury, Chester C. Some extension theorems for regular maps of Stein manifolds. (**50** #2565)

Shiffman, Bernard Extension of holomorphic maps. (**53** #889)

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Sommese, Andrew John Extension theorems for reductive group action on compact Kaehler manifolds. (**51** #8484)

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Aronov, A. M. (*with* Dautov, Š. A.) On a result of B. Weinstock. (Russian) **57** #3448

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(*with* Lawson, H. Blaine, Jr.) On boundaries of complex analytic varieties. I. **54** #13130

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Hunt, L. R. A uniqueness theory for the induced Cauchy-Riemann operator. **55** #12949

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Polking, John C. *See* **Harvey, Reese**, **53** #13642 *and* **Hunt, L. R.; et al.**, **58** #28663

Schumacher, Georg Über ebene, regulär faktorisierbare und einfache holomorphe Abbildungen. (English summary) **52** #3598

Siu, Yum Tong Analyticity of sets associated to Lelong numbers and the extension of meromorphic maps. **48** #8842

Sommese, Andrew John Extension theorems for reductive group actions on compact Kaehler manifolds. **52** #14370

Stout, Edgar Lee The boundary values of holomorphic functions of several complex variables. **55** #10722

Strauss, Monty J. *See* **Hunt, L. R.; et al.**, **58** #28663

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Becker, Joseph A. Normal hypersurfaces. (**53** #855)

Bedford, Eric Continuation of smooth holomorphic functions over analytic hypersurfaces. (**56** #8902)

Dahlberg, Björn E. J. Holomorphic mappings into smooth projective varieties. (**53** #13654)

Harvey, Reese Removable singularities of cohomology classes in several complex variables. (**51** #925)

Komatsu, Hikosaburo A local version of Bochner's tube theorem. (**47** #5297)

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Shiffman, Bernard Holomorphic and meromorphic mappings and curvature. (**55** #3328)

32D99 None of the above, but in this section

Ahern, Patrick Singular sets of inner functions. **46** #9390

Alexander, Herbert Holomorphic mappings from the ball and polydisc. **50** #5018

Beljaev, V. A. The connection between the holomorphy of $f(z,w)$ in one variable and its holomorphy in both variables. (Russian) **53** #5937

Chollet, Anne-Marie Ensembles de zéros à la frontière de fonctions analytiques dans la boule de $\mathbf{C}^n$. **48** #6463

Erkama, Timo Extensions of isomorphisms of polydiscs. **55** #10723

FitzGerald, Carl H. Analytic continuation of a function defined on a sequence of po **45** #3756

Hunt, L. R. An extension of the theorem of Hartogs. **45** #5402

(*with* Strauss, Monty J.) Uniqueness of analytic continuation: necessary sufficient conditions. **53** #13643

Marinov, M. S. A categorial characterization of analytic continuation. (Russian. Bulgarian and English summaries) **58** #17200

Motzkin, Elhanan La décomposition d'un élément analytique en facteurs singul (English summary) **57** #10005

Pinčuk, S. I. A boundary uniqueness theorem for holomorphic functions of sev complex variables. **50** #2558

The analytic continuation of holomorphic mappings. (Russian) **52** #14371

Royden, H. L. The extension of regular holomorphic maps. **49** #629

Sadullaev, A. A boundary uniqueness theorem in $\mathbf{C}^n$. (Russian) **58** #6341

Skwarczyński, Maciej A new notion of boundary in the theory of several comp variables. (Russian summary) **53** #11095

Strauss, Monty J. *See* **Hunt, L. R.**, **53** #13643

Zaharjuta, V. P. Transfinite diameter, Čebyšev constants and capacity for a compact in C^n. (Russian) **58** #6342

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Bony, Jean-Michel (*with* Schapira, Pierre) Sur le prolongement des solutions holomorphes d'equations aux dérivées partielles définies dans des ouverts conve (**45** #5596a)

(*with* Schapira, Pierre) Existence et prolongement des solutions analytiques systèmes hyperboliques non stricts. (**45** #5596b)

(*with* Schapira, Pierre) Problème de Cauchy, existence et prolongement pour hyperfonctions solutions des équations hyperboliques non strictes. (**45** #7241)

de Matos, Mário Carvalho ★Domains of τ-holomorphy in a separable Banach spa (**52** #6414)

★On the Cartan-Thullen theorem for some subalgebras of holomorphic functions in a locally convex space. (**52** #6424)

Domains of τ-holomorphy in a separable Banach space. (**45** #2472)

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Holomorphically bornological spaces and infinite-dimensional versions of Hartogs' theorem. (**57** #17284)

Meyer, Harold D. Numerical analytic continuation of holomorphic functions in C (French summary) (**56** #4124)

Palamodov, V. P. From hyperfunctions to analytic functionals. (Russian) (**58** #2264)

Schapira, Pierre *See* **Bony, Jean-Michel**, (**45** #5596a); **Bony, Jean-Michel**, (**45** #5596b) *and* **Bony, Jean-Michel**, (**45** #7241)

Tsuno, Yoshimichi On the prolongation of local holomorphic solutions of partial differential equations. (**50** #13834)

On the prolongation of local holomorphic solutions of partial differential equations. II. Prolongation across the pluri-harmonic hypersurface. (**54** #5598)

32Exx Holomorphic convexity

32E05 Holomorphically convex complex spaces, reduction theory

Andreotti, Aldo Convexité holomorphe dans les variétés algébriques. **50** #5019

Chen, Su Shing Carathéodory distance and convexity with respect to bounded holomorphic functions. **47** #5298 (E **49** #10922)

Coeuré, Gérard Prolongement analytique en dimension infinie. **54** #7853

Cragnolini, Paolo Il teorema delle matrici olomorfe invertibili nel caso non ridott (English summary) **58** #28664

Dineen, Seán Convexité holomorphe en dimension infinie. **53** #8490

Ducourtioux, Jean-Louis Sur des extensions de corps de fonctions méromorphes. **45** #7107

Hirschowitz, André Entre les hypersurfaces et les ensembles pseudoconcaves. **51** #35

Le problème de Lévi pour les espaces homogènes. **53** #3354

Huckleberry, Alan T. The Levi problem on pseudoconvex manifolds which are n strongly pseudoconvex. **53** #13644

The holomorphic convexity of pseudoconvex complex manifolds. **56** #8904

Hunt, L. R. The local envelope of holomorphy of an n-manifold in C^n. **45** #3758

Markoe, Andrew Invariance of holomorphic convexity under proper mappings. **52** #6034

Mastrangelo-Dehen, Michèle Linéarisation de la notion de convexité par rapport à ensemble de fonctions. **57** #16682

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Suzuki, Osamu Pseudoconvex domains on a Kähler manifold with positive holomorph bisectional curvature. **56** #8905

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On the classification of holomorphically convex spaces. **57** #709

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uzuki, Osamu A new class of domains of holomorphy. I. The concepts of boundary resolutions and L-manifolds. (**58** #6339a)

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einstock, Barnet M. Some conditions for uniform H-convexity. (**53** #13639)

32E10 Stein spaces, Stein manifolds

cquistapace, Francesca (*with* Broglia, Fabrizio) Problemi di Cousin e di Poincaré per spazi di Stein non ridotti. **51** #5968

(*with* Broglia, Fabrizio; Tognoli, Alberto) A relative embedding theorem for Stein spaces. **53** #870

ănică, Constantin (*with* Stănăşilă, Octavian) Some results on the extension of analytic entities defined out of a compact. **49** #10914

Duality theorems on Stein manifolds and cohomology with compact support. (Romanian. English summary) **48** #8843

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run, Jérôme Sur le problème de Levi dans certains fibres. (English summary) **51** #940

The Levi problem in holomorphic bundles with compact fibre. **56** #5938

urns, Daniel, Jr. On Venugopalkrishna's index problem. **56** #3346

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Ogni curva di una n-varietà di Stein è definita da n funzioni. (English summary) **53** #871 (E **54** #597)

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ornaess, John Erik An increasing sequence of Stein manifolds whose limit is not Stein. **54** #5498

2 dimensional counterexamples to generalizations of the Levi problem. **58** #6344

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Greene, Robert E. (*with* Wu, Hung Hsi) A theorem in complex geometric function theory. **50** #5021

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Gromov, M. L. (*with* Èliašberg, Ja. M.) Nonsingular mappings of Stein manifolds. (Russian) **46** #394

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Hayes, Sandra Homotopie für Okasche Paare von Garben homogener Räume. **49** #630

Hirschowitz, André Domaines de Stein et fonctions holomorphes bornés. **52** #14372

Huckleberry, Alan T. (*with* Nirenberg, Ricardo) On a class of complex spaces intermediate to Stein and Compact. **45** #7106

Jarnicki, Marek Holomorphic functions with polynomial growth. **58** #17201

Kajiwara, Joji (*with* Kazama, Hideaki) Continuation and quotient representation of meromorphic functions. **46** #3832

(*with* Kazama, Hideaki) Two dimensional complex manifold with vanishing cohomology set. **51** #3526

Cousin domains over complex projective 2-space. **50** #7581

Domain with many vanishing cohomology sets. **52** #14373

Kazama, Hideaki *See* **Kajiwara, Joji**, **46** #3832 *and* **Kajiwara, Joji**, **51** #3526

Kim, Dong Sie Erratum to: "Boundedly holomorphic convex Riemann domain" (Proc. Amer. Math. Soc. **41** (1973), 495–497). **51** #3527

Königsberger, Konrad Ein Satz über die q-Vollständigkeit lokal trivialer Faserungen. **46** #9391

Komplexe Faserräume mit 1-dimensionalen Fasern. **46** #5670

Kraus, Günther Relative Probleme von Poincaré und Cousin auf nicht-reduzierten komplexen Räumen. **56** #12310

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Laufer, Henry B. Imbedding annuli in $\mathbf{C}^2$. **49** #10915

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À propos des revêtements ramifiés d'espaces de Stein. **54** #5499

Lütkebohmert, Werner Steinsche Räume in der nichtarchimedischen Funktionentheorie. **48** #8844

Markoe, Andrew Runge families and increasing unions of Stein spaces. **54** #3026

Runge families and inductive limits of Stein spaces. (French summary) **58** #28665

Holomorphic convexity and the Corona property. **58** #17202

Môri, Yasuko A complex manifold with vanishing cohomology sets. **53** #13646

Nirenberg, Ricardo *See* **Huckleberry, Alan T.**, **45** #7106

Noverraz, Philippe Le problème de Lévi en dimension infinie. **55** #3315

Oniščik, A. L. Stein spaces. (Russian) **55** #5894

Pankov, A. A. *See* **Zaĭdenberg, M. G.**, **48** #2422

Pflug, Rolf Peter Quadratintegrable holomorphe Funktionen und die Serre-Vermutung. **52** #3599

Polynomiale Funktionen auf Steinschen Gebieten in Steinschen Mannigfaltigkeiten. **56** #5939

Ramspott, Karl Josef Eine Charakterisierung der Dimension Steinscher Mannigfaltigkeiten. **46** #2084

Sasaki, Takeshi (*with* Suzuki, Osamu) Some applications of Synge's formula to the theory of several complex variables. **56** #667

Schneider, Michael Tubenumgebungen Steinscher Räume. (English summary) **54** #7854

Silva, Alessandro Rungescher Satz and a condition for Steinness for the limit of an increasing sequence of Stein spaces. (French summary) **58** #22656

Siu, Yum Tong All plane domains are Banach-Stein. **50** #13603

Every Stein subvariety admits a Stein neighborhood. **55** #8407

Skoda, Henri Fibrés holomorphes à base et à fibre de Stein. (English summary) **55** #10724

Fibrés holomorphes à base et à fibre de Stein. **58** #22657

Stănăşilă, Octavian Certain algebraic properties related to local cohomology. (Romanian. English summary) **50** #10319

See also **Bănică, Constantin**, **49** #10914

Stehlé, Jean-Luc Plongements du disque dans C^2. **53** #872

Storch, Uwe *See* **Bingener, Jürgen**, **51** #3525

Stout, Edgar Lee Extensions of rings of holomorphic functions. **45** #7110

Stutz, John Primitive elements for modules over $\mathcal{O}(Y)$. **49** #3208

Suzuki, Osamu *See* **Sasaki, Takeshi**, **56** #667

Tognoli, Alberto Una caratterizzazione dei moduli delle sezioni globali di un fascio coerente su uno spazio di Stein. (English summary) **50** #5022

See also **Acquistapace, Francesca; et al.**, **53** #870

Ueda, Tetsuo Modifications continues des variétés de Stein. **57** #6502

Umemura, Hiroshi La dimension cohomologique des surfaces algébriques. **47** #5299

Vauthier, Jacques Estimés L^r à poids de l'opérateur de Green sur une variété de Stein. **50** #13604

Watanabe, Kiyoshi The Levi problem for the product manifold of an open Riemann surface and a compact Riemann surface. **52** #3600

The Levi problem for the product space of a Stein space and a compact Riemann surface. **54** #7855

Cousin domains in an L-pseudoconvex manifold. **54** #5500

Wells, R. O., Jr. Parametrizing the compact submanifolds of a period matrix domain by a Stein manifold. **46** #7555

Wiegmann, Klaus-Werner Komplexe Unterstrukturen auf Steinschen Räumen. **46** #3833

Wu, Hung Hsi *See* **Greene, Robert E.**, **50** #5021 *and* **Greene, Robert E.**, **52** #802

Yamaguchi, Hakuki An analogue of the first Lefschetz theorem for Stein varieties. **57** #16683

Zaĭdenberg, M. G. (*with* Pankov, A. A.) Certain global properties of holomorphic Fredholm operator valued functions. (Russian) **48** #2422

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Barlet, Daniel Convexité de l'espace des cycles. (English summary) (**56** #5943)

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Bros, Jacques (*with* Iagolnitzer, Daniel) Tuboïdes dans C^n et généralisation d'un théorème de Cartan et Grauert. (English summary) (**55** #698)

Brun, Jérôme Le problème de Levi dans les fibrés à base de Stein et à fibre une courbe compacte. (English summary) (**58** #6374)

Coen, Salvatore Annulation de la cohomologie à valeur dans le faisceau structural et espaces de Stein. (**58** #17194)

Farkas, Petru About Stein compacts and holomorphic spaces. (**53** #13659)

Gérard, Raymond (*with* Jouanolou, Jean-Pierre) Étude de l'existence de feuilles compactes pour certains feuilletages analytiques complexes. (**48** #11561)

Gramsch, Bernhard Ein Zerlegungssatz für Resolventen elliptischer Operatoren. (**48** #6979)

Greene, Robert E. (*with* Wu, Hung Hsi) Embedding of open Riemannian manifolds by harmonic functions. (French summary) (**52** #3583)

Heal, E. R. (*with* Windham, M. P.) Finitely generated F-algebras with applications to Stein manifolds. (**50** #13605)

Hervier, Yves Sur le problème de Levi banachique. (**58** #2277)

Hirschowitz, André Sur certains fibrés à base et fibre de Stein. (**47** #3713 (E **50** #7598))

Pseudoconvexité au-dessus d'espaces plus ou moins homogènes. (**50** #10323)

Iagolnitzer, Daniel *See* **Bros, Jacques**, (**55** #698)

Jouanolou, Jean-Pierre *See* **Gérard, Raymond**, (**48** #11561)

Kajiwara, Joji (*with* Watanabe, Kiyoshi) Domain with a vanishing cohomology set in two dimensional complex projective space. (**58** #1258)

Domain with a vanishing cohomology set in a product manifold of an open Riemann surface and a one dimensional complex torus. (**58** #1259)

(*with* Watanabe, Kiyoshi) Extension of Cartan-Behnke-Stein's theorem for a product of two Riemann surfaces. (**58** #1260)

Kazama, Hideaki q-complete complex Lie groups and holomorphic fibre bundles over a Stein manifold. (**46** #3839)

van Kuilenburg, M. A. Algebras of holomorphic functions and their maximal ideal spaces. (51 #931)
Kulkarni, Ravindra S. On complexifications of differentiable manifolds. (57 #724)
Leiterer, Jürgen Coherent analytic sheaves that are continuous up to the boundary. (Russian. Georgian and English summaries) (50 #7576)
Lin, V. Ja. Holomorphic fiberings and multivalued functions of elements of a Banach algebra. (Russian) (47 #7444)
Matsugu, Yasuo The Levi problem for a product manifold. (48 #569)
Michel, Daniel Sur les ouverts pseudo-convexes des espaces homogènes. (English summary) (57 #719)
Murray, John J. A defect relation on Stein manifolds. (57 #6519)
Palamodov, V. P. On a Stein manifold the Dolbeault complex splits in positive dimensions. (Russian) (47 #2094)
Pankov, A. A. Multiplicative structure and characteristic sets of holomorphic Noetherian operator-valued functions. (Russian) (49 #9660)
Rossi, H. A Docquier-Grauert lemma for strongly pseudoconvex domains in complex manifolds. (52 #11117)
Sandroni, Alba C^∞ families of Stein manifolds. (Italian summary) (54 #3029)
Sibony, Nessim Fibrés holomorphes et métrique de Carathéodory. (50 #5037)
Siu, Yum Tong The Levi problem. (57 #12917)
Speder, Jean-Paul *See* **Ancona, Vincenzo,** (51 #941)
Stehlé, Jean-Luc Fonctions plurisousharmoniques et convexité holomorphe de certains fibrés analytiques. (51 #10693)
  Fonctions plurisousharmoniques et convexité holomorphe de certains fibrés analytiques. (53 #3368)
Strehl, Burckhard Analytische Hyperflächen mit vorgegebenen Singularitäten. (50 #13597)
Suzuki, Osamu Supplement to: "Pseudoconvex domains on a Kähler manifold with positive holomorphic bisectional curvature" (Publ. Res. Inst. Math. Sci. **12** (1976/77), no. 1, 191–214). (56 #8906)
Takeuchi, Shigeru On completeness of holomorphic principal bundles. (51 #8483)
Vauthier, Jacques Estimées L^r à poids de l'opérateur de Green sur une variété de Stein. (58 #28672)
Watanabe, Kiyoshi *See* **Kajiwara, Joji,** (58 #1258) *and* **Kajiwara, Joji,** (58 #1260)
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32E15 Runge pairs

Borchers, Hans-Jürgen The generalized three circle- and other convexity theorems with application to the construction of envelopes of holomorphy. (French summary) 56 #15981
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Hayes, Sandra Approximation für Okasche Paare von Garben homogener Räume. (English summary) 49 #10916
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Makarova, L. Ja. (*with* Hudaĭberganov, G.; Čerkašin, V. P.) On the question of polynomial and linear convexity. (Russian) 49 #10917
Popa, Nicolae Sur le problème de Levi dans les espaces de Silva à base. 51 #8464
Ramspott, Karl Josef Fortsetzung ganzzahliger Cozyklen von kompakten Teilen. (English summary) 48 #2423
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Langmann, Klaus Fortsetzbarkeit von Cousinverteilungen. (47 #8905)
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Noverraz, Philippe Sur la pseudo-convexité et la convexité polynomiale en dimension infinie. (English summary) (49 #5841)

32E20 Polynomial convexity

Alexander, Herbert A note on polynomial hulls. 45 #3757
  Projections of polynomial hulls. 49 #3209
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Amar, Denise (*with* Amar, Éric) Bases d'exponentielles en plusieurs variables. 57 #3451
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Gamelin, Theodore W. The polynomial hulls of certain subsets of C^2. 53 #13647
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  See also **Makarova, L. Ja.; et al.,** 48 #2424
Makarova, L. Ja. (*with* Potemkina, E. A.) Supplementary rationally convex hull (Russian) 57 #6504
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Noverraz, Philippe Convexité fonctionnelle dans les espaces de Banach à base. 52 #11110
  Sur le théorème de Cartan-Thullen-Oka en dimension infinie. 49 #631
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Seničkin, V. N. An example of a thick polynomially convex compact subset of t C^2 with a connected interior on which not every continuous function that is at the interior points can be approximated uniformly by polynomials. (45 #3789
Shackell, John R. A class of surfaces in C^2 and their polynomial hulls. 51 #35
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Freeman, Michael The uniform algebra generated by z and a smooth even fu (46 #9740)
  (*with* Harvey, Reese) A compact set that is locally holomorphically conv not holomorphically convex. (48 #4350)
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Harvey, Reese *See* **Freeman, Michael,** (48 #4350)
Matsubara, Minoru On the existence of the solution for the equation $f_1g_1+f_2g_2+\cdots+f_ng_n=1$. (58 #7097)
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32E25 Algebras of holomorphic functions

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32Gxx Deformations of analytic structures

32G05 Deformations of complex structures [See also 13D10, 16A58, 58H05.]

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MacLachlan, Colin Modular groups and fiber spaces over Teichmüller spaces. **50** #7590
Marden, Albert (*with* Masur, Howard) A foliation of Teichmüller space by twist invariant disks. **52** #14393 (E **56** #3359)
  (*with* Masur, Howard) Addendum to: "A foliation of Teichmüller space by twist invariant disks" (Math. Scand. **36** (1975), no. 2, 211–228). **56** #3359
Masur, Howard The curvature of Teichmüller space. **52** #11120
  On a class of geodesics in Teichmüller space. **52** #6038
  Extension of the Weil-Petersson metric to the boundary of Teichmuller space. **54** #5506
  See also **Hubbard, John Hamal**, **52** #14392; **Marden, Albert**, **52** #14393 (E **56** #3359) *and* **Marden, Albert**, **56** #3359
Matelski, J. Peter A compactness theorem for Fuchsian groups of the second kind. **55** #5900 (EA **55/56**)
(Novodvorsky, Mark E.) *See* **Bers, Lipman**, **54** #10677
Patterson, David B. Some remarks on the moduli of punctured spheres. **50** #10330
Riera, Gonzalo G. Semi-direct products of Fuchsian groups and uniformization. **58** #6363
  Algebraic quotients of Bergman domains. **58** #6364
Royden, H. L. Metrics on Teichmüller space. **53** #883
  Invariant metrics on Teichmüller space. **51** #13290
  Intrinsic metrics on Teichmüller space. **56** #5946
Sato, Hiroki Cusps on boundaries of Teichmüller spaces. **53** #884
Šeretov, V. G. The Dirichlet principle, and extremal quasiconformal mappings of open Riemann surfaces. (Russian) **53** #8496
Shibata, Keiichi On the defining properties of Teichmüller map. **56** #680
Singerman, David *See* **Macbeath, A. M.**, **53** #882
Stehlé, Jean-Luc Sous-espaces de Weierstrass. **52** #11121
Tukia, Pekka The space of quasisymmetric mappings. **56** #8915
Wason, Judith C. On the straightness of reduced Teichmüller space. **54** #5507
Wolpert, Scott Noncompleteness of the Weil-Petersson metric for Teichmüller space. **54** #10678
  The eigenvalue spectrum as moduli for compact Riemann surfaces. **58** #17228
  The finite Weil-Petersson diameter of Riemann space. **58** #6365

Secondary classifications:

Abikoff, William Moduli of Riemann surfaces. (**53** #5855)
Accola, Robert D. M. Some loci of Teichmüller space for genus five defined by vanishing theta nulls. (**51** #10611)
(Ahlfors, Lars V.) *See* **Crash course on Kleinian groups**, (**49** #10878)
Bers, Lipman Universal Teichmüller space. (**50** #2481)
  The action of the universal modular group on certain boundary points. (**57** #16581)
  Quasiconformal mappings, with applications to differential equations, function theory and topology. (**57** #3384)
  See also **Crash course on Kleinian groups**, (**49** #10878)
Chang, Fwu Ranq On the diameters of compact Riemann surfaces. (**56** #5866)
Douady, Adrien (*with* Hubbard, John Hamal) On the density of Strebel differentials. (**53** #796)
Earle, Clifford J. (*with* Kra, Irwin) On isometries between Teichmüller spaces. (**50** #596)
Farkas, Hershel M. *See* **Rauch, Harry E.**, (**50** #4595)
Gilman, Jane On the moduli of compact Riemann surfaces with a finite number of punctures. (**50** #13498)
Gramain, André Le type d'homotopie du groupe des difféomorphismes d'une surface compacte. (**48** #5116)
  Groupe des difféomorphismes et espace de Teichmüller d'une surface (d'après C. Earle et J. Eells). (**54** #13945)
Harvey, W. J. *See* **MacLachlan, Colin**, (**51** #10614)
Harvey, William Chabauty spaces of discrete groups. (**51** #883)
  Spaces of discrete groups. (**58** #16961)
Hejhal, Dennis A. Sur les paramètres accessoires pour l'uniformisation de Schottky. (**51** #13215a)
  Sur les paramètres accessoires pour l'uniformisation de Schottky. (**51** #13215b)
  Monodromy groups for higher-order differential equations. (**51** #884)
  Quelques remarques au sujet des fontions linéairement polymorphes sur une surface de Riemann. (English summary) (**51** #3427)
Hubbard, John Hamal *See* **Douady, Adrien**, (**53** #796)
Kaliman, Š. I. A holomorphic universal covering of the space of polynomials without multiple roots. (Russian) (**58** #28654)
Keen, Linda On fundamental domains and the Teichmüller modular group. (**51** #885)
  A modular group and Riemann surfaces of genus 2. (**51** #8404)
Kra, Irwin *See* **Earle, Clifford J.**, (**50** #596) *and* **Crash course on Kleinian groups**, (**49** #10878)
Kruškal′, S. L. Stability of Kleinian groups. (Russian) (**50** #2484)
  Quasiconformal deformations of Kleinian groups. (Russian) (**52** #741)
Kuribayashi, Akikazu On the equations of compact Riemann surfaces of genus 3 and generalized Teichmüller spaces. (**54** #5243)
Lax, Robert F. On the dimension of varieties of special divisors. II. (**51** #12865)
  Weierstrass points of the universal curve. (**52** #5681 (EA **53**))
  On the dimension of varieties of special divisors. (**50** #13049)
MacLachlan, Colin (*with* Harvey, W. J.) On mapping-class groups and Teichmü spaces. (**51** #10614)
  Note on the Hurwitz-Nielsen realisation problem. (**56** #1303)
Marden, Albert Isomorphisms between Fuchsian groups. (**54** #540)
Maskit, Bernard Moduli of marked Riemann surfaces. (**49** #10875)
Nakai, Mitsuru Divisors on meromorphic function fields. (**52** #5956)
Natanzon, S. M. Moduli of real algebraic curves. (Russian) (**53** #10815)
Ramírez Flores, Arturo Classification of domains of finite connectivity. (Spanish) (**58** #11391)
Rauch, Harry E. (*with* Farkas, Hershel M.) ★Theta functions with applications Riemann surfaces. (**50** #4595)
Rochberg, Richard Algebras of analytic functions on degenerating Riemann surfac (**50** #10289)
  Almost isometries of Banach spaces and moduli of Riemann surfaces. II. (**51** #13216)
Sato, Hiroki On boundaries of Schottky spaces. (**54** #5463)
Sorvali, Tuomas On Teichmüller spaces of tori. (**55** #8349)
Strebel, Kurt On the geometry of the metric induced by a quadratic differential. (Polish summary) (**58** #28481a)
  On the geometry of the metric induced by a quadratic differential. II. (Polis summary) (**58** #28481b)
Timmann, Steffen Einbettungen endlicher Riemannscher Flächen. (**52** #11033)
Tukia, Pekka On infinite dimensional Teichmüller spaces. (**58** #28484)
Crash course on Kleinian groups ★A crash course on Kleinian groups. (**49** #10878)
Kleinian groups *See* **Crash course on Kleinian groups**, (**49** #10878)
Meeting:
  American Mathematical Society *See* **Crash course on Kleinian groups**, (**49** #1087

32G20 Period matrices

Cattani, Eduardo H. On the partial compactification of the arithmetic quotient of period matrix domain. **50** #10331
Gunning, Robert C. ★Riemann surfaces and generalized theta functions. **56** #15991
Kempf, George R. A property of the periods of a Prym differential. **53** #5945
Martens, Henrik H. Riemann matrices with many polarizations. **58** #1266
Zarrow, Robert A canonical form for symmetric and skew-symmetric extended symplectic modular matrices with applications to Riemann surface theory. **53** #11100

Secondary classifications:

Accola, Robert D. M. Algebraic curves and half-canonical linear series. (**50** #7157)
Alling, Norman L. On Cauchy's theorem for real algebraic curves with boundary. (**56** #8580)
Cattani, Eduardo H. (*with* Kaplan, Aroldo G.) Extension of period mappings for Hodge structures of weight two. (**55** #5904)
Čuešev, V. V. Moduli of Schottky groups. (Russian) (**58** #6362)
Ehrenpreis, Léon (*with* Martens, Henrik H.; Farkas, Hershel M.; Rauch, Harry E.) On the Poincaré relation. (**50** #13501)
  (*with* Farkas, Hershel M.) Some refinements of the Poincaré period relation (**50** #13502)
Farkas, Hershel M. *See* **Ehrenpreis, Léon; et al.**, (**50** #13501) *and* **Ehrenpreis, Léon**, (**50** #13502)
Gaeta, Federico On the collineation group of a normal projective Abelian variety (**52** #5686)
Griffiths, Phillip On Abel's differential equations. (**58** #655)
Gunning, Robert C. Quadratic periods of hyperelliptic Abelian integrals. (**50** #7511)
  ★Lectures on Riemann surfaces, Jacobi varieties. (**50** #9875)
Kaplan, Aroldo G. *See* **Cattani, Eduardo H.**, (**55** #5904)
Kuribayashi, Akikazu On the generalized Teichmüller spaces and differential equations (**54** #13141)
Martens, Henrik H. Remarks on complex multiplication and singular Riemann matrices (**50** #7168)
  See also **Ehrenpreis, Léon; et al.**, (**50** #13501)
Mumford, David Prym varieties. I. (**52** #415)
Namba, Makoto On families of effective divisors on algebraic manifolds. (**57** #16711)
Persson, Ulf On degenerations of algebraic surfaces. (**57** #6030)
Peters, C. A. M. The local Torelli theorem. I. Complete intersections. (**56** #357a (E **5** #357b))
  The local Torelli-theorem. II. Cyclic branched coverings. (**56** #357c)
  Erratum: "The local Torelli theorem. I. Complete intersections" (Math. Ann. **21** (1975), no. 1, 1–16). (**56** #357b)
Rauch, Harry E. *See* **Ehrenpreis, Léon; et al.**, (**50** #13501)
Saito, Kyoji Regularity of Gauss-Manin connection of flat family of isolated singularities. (**51** #12846)
Sasaki, Takeshi On the finiteness of the monodromy group of the system of hypergeometric differential equations (F_D). (**58** #16654)
Sato, Hiroki On periods of meromorphic Eichler integrals. (**51** #5922)
Wells, R. O., Jr. Automorphic cohomology on homogeneous complex manifolds. (**57** #6529)
Yoon, Ok Young Poincaré period relation on compact Riemann surfaces. (**50** #2178)

32G99 None of the above, but in this section

Barlet, Daniel Cycles dépendant analytiquement d'un paramètre. **50** #13614

ikawa, Eiji On deformations of holomorphic maps. **47** #508
On deformations of holomorphic maps. I. **48** #571
On deformations of holomorphic maps. II. **50** #5027
On deformations of holomorphic maps. **51** #8470
On deformations of quintic surfaces. (See Zbl **317** #14018; MR **48** #8511)
On deformations of rational maps. **55** #720
On deformations of holomorphic maps. III. **54** #5508
emidjian, Garo K. CR structures and their extensions. **56** #15992
ah, V. S. Versal deformation of germs of holomorphic mappings. (Russian) **49** #5401

Secondary classifications:

hman, L. M. *See* **Hudaĭ-Verenov, M. G.**, (**57** #10052)
rard, Raymond On holomorphic solutions of certain kind of Pfaffian systems with singularities. (**58** #7679)
rbacevič, V. V. Lattices in solvable Lie groups, and deformations of homogeneous spaces. (Russian) (**50** #4816)
daĭ-Verenov, M. G. (*with* Geĭhman, L. M.) Construction of the solutions of a certain class of differential equations in P^2. (Russian. Turkmen and English summaries) (**57** #10052)
hlmann, Norbert Ein Satz über Regelflächen vom Geschlecht >2. (**58** #11527)
nducci, Mario On Riemann-Hilbert and Cauchy problem for differential forms. (Italian summary) (**57** #13236)
eberman, David I. (*with* Serenesi, E.) Semicontinuity of Kodaira dimension. (**51** #8481)
renesi, E. *See* **Lieberman, David I.**, (**51** #8481)

2Hxx Analytic mappings

bayashi, Shoshichi Intrinsic distances, measures and geometric function theory. **54** #3032

32H05 Representative domains

rgman, Stefan Properties of pseudo-conformal images of Reinhardt circular domains. (Polish and Russian summaries) **51** #3537
On pseudo-conformal mappings of circular domains. **47** #509
Bounds for distortion in pseudoconformal mappings. **51** #13291
On distinguished representative domains. **55** #10731
vidov, J. T. The representative domain of a complex manifold and the Lu-Qi-Keng conjecture. **57** #6515
rnaess, John Erik (*with* Stout, Edgar Lee) Spreading polydiscs on complex manifolds. **57** #10009
kui, Seiichi *See* **Ozaki, Shigeo; et al.**, **52** #6039
nemaru, Tadayoshi On the 2nd-A-representative domain. **52** #14394
tô, Sadao *See* **Ozaki, Shigeo**, **45** #3763
kuchi, Keizō Canonical domains and their geometry in C^n. **46** #3836
On pseudo-conformal mappings of bounded domains in $\mathbf{C}^n$. **58** #17229
atsuura, Shozo On the Lu Qi-Keng conjecture and the Bergman representative domains. **50** #7591
The generalized Martin's minimum problem and its applications in several complex variables. **51** #8471
zaki, Shigeo (*with* Tashiro, Yoshiaki; Fukui, Seiichi) Mapping functions onto the normal domain and geodesic surfaces. **52** #6039
(*with* Katô, Sadao) Bergman minimal domains in several complex variables. **45** #3763
warczyński, Maciej A class of domains determined by an invariant property of the Bergman function. (Polish and Russian summaries) **51** #3538
out, Edgar Lee *See* **Fornaess, John Erik**, **57** #10009
shiro, Yoshiaki *See* **Ozaki, Shigeo; et al.**, **52** #6039

Secondary classifications:

onov, A. M. (*with* Zinov′ev, B. S.) A problem of biholomorphic mappings. (Russian) (**57** #16650)
hmielowski, Jan Théorèmes d'identité en dimension infinie. (**57** #1539)
dlalla, Adib A. The Carathéodory metric near boundaries of pseudoconvex domains. (Italian summary) (**49** #3204)
rru, Giovanni Pseudoconformal mappings in space. I. (Romanian summary) (**53** #8417)
nov′ev, B. S. *See* **Aronov, A. M.**, (**57** #16650)

32H10 Bergman kernel function

utet de Monvel, Louis (*with* Sjöstrand, Johannes) Sur la singularité des noyaux de Bergman et de Szegő. **58** #28684
ickson, Lawrence J. Estimates for the Szegő and Poisson kernels of sufficiently rounded tube domains. **47** #510
iederich, Klas Über die 1. und 2. Ableitungen der Bergmanschen Kernfunktion und ihr Randverhalten. **48** #6472
Some recent developments in the theory of the Bergman kernel function: a survey. **56** #681
goryčev, G. P. Computation of Szegő and Bergman kernels for certain n-circular domains by means of multidimensional residues. (Russian) **51** #8472
efferman, Charles L. On the Bergman kernel and biholomorphic mappings of pseudoconvex domains. **49** #3218
The Bergman kernel and biholomorphic mappings of pseudoconvex domains. **50** #2562
See also **Sibony, Nessim**, **56** #12328
orelli, Frank (*with* Rudin, Walter) Projections on spaces of holomorphic functions in balls. **50** #10332
Kashiwara, Masaki Analyse micro-locale du noyau de Bergman. **58** #28685
Kerzman, Norberto The Bergman kernel function. Differentiability at the boundary. **45** #3762
(*with* Stein, Elias M.) The Szegő kernel in terms of Cauchy-Fantappiè kernels. **58** #22676
Kikuchi, Keizō Starlike and convex mappings in several complex variables. **48** #572
Kohn, Joseph J. Holomorphic extensions of orthogonal projections into holomorphic functions. **53** #3364
Kytmanov, A. M. The estimation of the Ricci curvature of a Bergman metric that is invariant under biholomorphic mappings. (Russian) **56** #15993
Naruki, Isao On extendibility of isomorphisms of Cartan connections and biholomorphic mappings of bounded domains. **53** #5946
Nazarjan, È. O. The estimation of the Ricci curvature of the Bergman metric. (Russian. Armenian and English summaries) **51** #8473
Ogata, Takehide A remark on Bergman metrics. **56** #12327
Phong, D. H. (*with* Stein, Elias M.) Estimates for the Bergman and Szegö projections on strongly pseudo-convex domains. **56** #8916
Ramadanov, Ivan-Pierre Le problème de l'inversion d'un théorème de Bremerman et ses applications à la transformation biholomorphe. (French summary) **54** #603
An inverse of a theorem of Bremerman for Reinhardt domains. **51** #936
The Bergman kernel function in special domains in C^n and some problems of biholomorphic mappings. **51** #10697
Rudin, Walter *See* **Forelli, Frank**, **50** #10332
Sibony, Nessim Noyau de Bergman et applications biholomorphes dans des domaines strictement pseudo-convexes (d'après Charles Fefferman). **56** #12328
Sjöstrand, Johannes *See* **Boutet de Monvel, Louis**, **58** #28684
Skwarczyński, Maciej The Bergman function and semiconformal mappings. (Russian summary) **50** #7592
Stein, Elias M. *See* **Phong, D. H.**, **56** #8916 *and* **Kerzman, Norberto**, **58** #22676
Suita, Nobuyuki (*with* Yamada, Akira) On the Lu Qi-keng conjecture. **54** #13142
Svistkova, G. P. *See* **Zinov′ev, B. S.**, **57** #12911
Yamada, Akira *See* **Suita, Nobuyuki**, **54** #13142
Zinov′ev, B. S. Reproducing Bergman kernels for n-circular regions, their "extension" and the connection with Szegő kernels. (Russian) **45** #3764
(*with* Svistkova, G. P.) Finding the reproducing Bergman and Szegö kernels for a certain class of multiply circular domains. (Russian) **57** #12911

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Bergman, Stefan ★The kernel function and conformal mapping. (**58** #22502)
Bonami, Aline (*with* Lohoué, Noël) Noyaux de Szegö de certains domaines de $\mathbf{C}^n$ et inégalités L^p. (**56** #15964)
Chalmers, Bruce L. Subspace kernels and minimum problems in Hilbert spaces with kernel function. (**49** #9603)
D'Angelo, John P. A note on the Bergman kernel. (**57** #12906)
Fefferman, Charles L. Monge-Ampère equations, the Bergman kernel, and geometry of pseudoconvex domains. (**53** #11097a (E **53** #11097b))
Ise, Mikio On Thullen domains and Hirzebruch manifolds. I. (**53** #13662)
Kracht, Manfred W. (*with* Schröder, Gunnar) Bergmansche Polynom-Erzeugende erster Art. (**48** #2542)
Lohoué, Noël *See* **Bonami, Aline**, (**56** #15964)
Matsuura, Shozo On the Lu Qi-Keng conjecture and the Bergman representative domains. (**50** #7591)
Narasimhan, Raghavan Automorphisms of bounded domains in C^n. (**53** #8513)
Oeljeklaus, Helmut Über die Automorphismengruppe von Ellipsoiden. (**48** #2421)
Poliščuk, E. M. The operator $\sum_1^\infty \partial^2/\partial c_k \partial \bar{c}_k$ in a space with a kernel function. (Russian. Lithuanian and English summaries) (**54** #11098)
Schröder, Gunnar *See* **Kracht, Manfred W.**, (**48** #2542)
Skwarczyński, Maciej A new notion of boundary in the theory of several complex variables. (Russian summary) (**53** #11095)
Stein, Elias M. Singular integrals and estimates for the Cauchy-Riemann equations. (**47** #3851)

32H15 Invariant metrics and pseudodistances

Barth, Theodore J. Some counterexamples concerning intrinsic distances. **56** #12329
Burbea, Jacob The Carathéodory metric and its majorant metrics. **56** #3360
Inequalities between intrinsic metrics. **58** #1267
On the Hessian of the Carathéodory metric. **58** #1268
Campbell, L. Andrew (*with* Ogawa, Roy H.) On preserving the Kobayashi pseudodistance. **51** #8474
(*with* Howard, Alan; Ochiai, Takushiro) Moving holomorphic disks off analytic subsets. **54** #13143
Chen, Su Shing On a class of quasiconformal functions in Banach spaces. **47** #7065
Bounded holomorphic functions in Siegel domains. **48** #573
Erratum: "Carathéodory distance and convexity with respect to bounded holomorphic functions" (Proc. Amer. Math. Soc. **39** (1972), 305–307). **49** #10922
Davidov, J. T. On a principle of compactness and generalization of certain theorems to H. Cartan and Carathéodory. **55** #5901
Fadlalla, Adib A. Le principe du module maximum et la sphère limite de charathéodory dans un domaine strictement pseudoconvexe. I. **50** #2563
La boule limite de Carathéodory. II, III. **50** #2564
Graham, Ian Boundary behavior of the Carathéodory, Kobayashi, and Bergman metrics on strongly pseudoconvex domains in $\mathbf{C}^n$ with smooth boundary. **48** #2428
Hahn, Kyong T. Distortions of a bounded domain by holomorphic mappings. **51** #5975 (E **57** #6520)
On completeness of the Bergman metric and its subordinate metric. **54** #5509
On completeness of the Bergman metric and its subordinate metrics. II. **58** #6366

Geometry on the unit ball of a complex Hilbert space. **57** #16706
Inequality between the Bergman metric and Carathéodory differential metric. **57** #16707
Howard, Alan *See* **Campbell, L. Andrew; et al.**, **54** #13143
Hristov, V. Z. Limits of Carathéodory and Kobayashi pseudometrics. **55** #5902
The Carathéodory pseudometric under factorization of complex manifolds. **56** #12330
Jordan, Steven L. Three invariants for complex manifolds. **48** #8855
Kalka, Morris A deformation theorem for the Kobayashi metric. **54** #604
Kim, Dong Sie Carathéodory distance and bounded holomorphic functions. **51** #8475 (EA **52**)
Complete domains with respect to the Carathéodory distance. **51** #3539
Complete domains with respect to the Carathéodory distance. II. **52** #3613
Kobayashi, Shoshichi Pseudo-distances intrinsèques sur les espaces complexes. **54** #7862
Invariante Distanzen auf Komplexen Räumen. **50** #7593
Some remarks and questions concerning the intrinsic distance. **48** #8856
Some problems on intrinsic distances and measures. **58** #1269
Intrinsic distances associated with flat affine or projective structures. **56** #3361
Kytmanov, A. M. An estimate of the Ricci curvature of the Bergman metric. (Russian) **58** #6367
Ławrynowicz, Julian Electromagnetic field and the theory of conformal and biholomorphic invariants. **58** #1270
Lebed′, B. Ja. Estimates of the curvature of a Bergman metric that is invariant under biholomorphic mappings. (Russian) **45** #5407
L′vovskiĭ, M. N. Integral representations of hyperbolic volumes. (Russian. English summary) **55** #3327
Ochiai, Takushiro *See* **Campbell, L. Andrew; et al.**, **54** #13143
Ogawa, Roy H. *See* **Campbell, L. Andrew**, **51** #8474
Vormoor, Norbert Topologische Fortsetzung biholomorpher Funktionen auf dem Rande bei beschränkten streng-pseudokonvexen Gebieten im $\mathbf{C}^n$ mit C^∞-Rand. **51** #3540
Wright, Marcus W. The behavior of the infinitesimal Kobayashi pseudometric in deformations and on algebraic manifolds of general type. **56** #8917

Secondary classifications:

Alexander, Herbert Proper holomorphic mappings of bounded domains. (**56** #12316)
Burbea, Jacob The Carathéodory metric in plane domains. (**57** #6408)
Chen, Su Shing Carathéodory distance and convexity with respect to bounded holomorphic functions. (**47** #5298 (E **49** #10922))
Chollet, Anne-Marie Ensembles de zéros à la frontière de fonctions analytiques dans des domaines strictement pseudo-convexes. (English summary) (**54** #588)
Duchamp, T. (*with* Kalka, Morris) Holomorphic foliations and the Kobayashi metric. (**57** #4192)
Dwyer, Thomas A. W., III Convolution equations for vector-valued entire functions of nuclear bounded type. (**58** #7083)
Goldberg, Samuel Irving On the distance-decreasing property of a class of real harmonic mappings. (**52** #11786)
Graham, Ian Boundary behavior of the Carathéodory and Kobayashi metrics on strongly pseudoconvex domains in C^n with smooth boundary. (**51** #8468)
Boundary behaviour of the Carathéodory and Kobayashi metrics. (**56** #12321)
Hahn, Kyong T. Trigonometry on the unit ball of a complex Hilbert space. (**51** #4305)
Kalka, Morris *See* **Duchamp, T.**, (**57** #4192)
Klembeck, Paul F. Kähler metrics of negative curvature, the Bergmann metric near the boundary, and the Kobayashi metric on smooth bounded strictly pseudoconvex sets. (**57** #3455)
Kruškal′, S. L. Two theorems on Teichmüller spaces. (Russian) (**53** #13652)
Kulle, Rolf-Dieter Eigentliche, holomorphe Abbildungen der Kugel in sich. (**50** #10314)
Renaud, André Distances intrinsèques sur la boule de dimension infinie. (**56** #1341)
Royden, H. L. Invariant metrics on Teichmüller space. (**51** #13290)
The extension of regular holomorphic maps. (**49** #629)
Intrinsic metrics on Teichmüller space. (**56** #5946)
Sibony, Nessim Fibrés holomorphes et métrique de Carathéodory. (**50** #5037)
Prolongement des fonctions holomorphes bornées et métrique de Carathéodory. (**52** #6029)
Stanton, Charles M. Embedding Riemann surfaces in polydiscs. (**56** #669)
Tanaka, Hiroshi On Harnack's pseudo-distance. (**57** #16576)
Vesentini, Edoardo Invariant metrics on convex cones. (**55** #6206)

32H20 Hyperbolic complex manifolds

Barth, Theodore J. Separate analyticity, separate normality, and radial normality for mappings. **56** #5947
Brody, Robert (*with* Green, Mark Lee) A family of smooth hyperbolic hypersurfaces in P_3. **56** #12331
Compact manifolds in hyperbolicity. **57** #10010
Dinghas, Alexander On distortion theorems in classical domains of several complex variables. (Romanian summary) **47** #7539
Eastwood, Alan A propos des variétés hyperboliques complètes. **54** #3033
Fukushima, Yukio Continuation of holomorphic mappings into hyperbolic spaces. **53** #8497
Goldberg, Samuel Irving (*with* Ishihara, Tôru) Harmonic quasiconformal mappings of Riemannian manifolds. **53** #8498
Green, Mark Lee The complement of the dual of a plane curve and some new hyperbolic manifolds. **50** #5028
The hyperbolicity of the complement of $2n+1$ hyperplanes in general position in P_n and related results. **56** #15994
See also **Brody, Robert**, **56** #12331
Griffiths, Phillip A Schottky-Landau theorem for holomorphic mappings in several complex variables. **51** #3541
Differential geometry and complex analysis. **53** #3365
Hahn, Kyong T. Quantitative Bloch's theorem for certain classes of holomorphic mappings of the ball into $P_n(C)$. **53** #885
Ishihara, Tôru *See* **Goldberg, Samuel Irving**, **53** #8498
Kiernan, Peter (*with* Kobayashi, Shoshichi) Satake compactification and extensio holomorphic mappings. **46** #9398
Hyperbolically imbedded spaces and the big Picard theorem. **51** #8476
See also **Kobayashi, Shoshichi**, **48** #4353
Kobayashi, Shoshichi Schwarz lemma. **53** #5947
(*with* Kiernan, Peter) Holomorphic mappings into projective space with lacu hyperplanes. **48** #4353
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Chéniot, Denis (*with* Lê Dũng Tráng) Remarque sur les cycles évanouissants d'une hypersurface analytique à singularité non isolée. (**48** #11562)
Un théorème du type de Lefschetz. (English summary) (**52** #10738)
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Schneider, Michael Lefschetzsätze und Hyperkonvexität. (**53** #3362)
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32J99 None of the above, but in this section

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Gauduchon, Paul La classe de Chern pluriharmonique d'un fibré en droites. (English summary) **55** #3335
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Kato, Mitsuyoshi Partial Poincaré duality for k-regular spaces and complex algebraic sets. (**56** #8900)
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32K05 Banach analytic spaces [See also 58Bxx.]

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32K15 Differentiable functions on analytic spaces, differentiable spaces [see also 58C25.]

Arnol′d, V. I. A classification of the unimodal critical points of functions. (Russian) **48** #2431

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(*with* Polking, John C.) C^k weakly holomorphic functions on an analytic curve. **48** #8858

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See also **Clerc, J. C.**, (52 #11357)

Jung, Gerhard ★Quotienten nach endlichen Automorphismengruppen analytischer und differenzierbarer Algebren. (49 #3194)
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32K99 None of the above, but in this section

Farkas, Petru About Stein compacts and holomorphic spaces. **53** #13659

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32Lxx Holomorphic fiber spaces [See also 55Fxx.]

32L05 Holomorphic fiber bundles and generalizations

Ancona, Vincenzo Sui fibrati analitici reali E-principali. I. Alcuni teoremi sulle matrici olomorfe invertibili. **53** #13660

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Gaveau, Bernard (*with* Vauthier, Jacques) Annulations et calculs infinitésimaux de laplacien pour un fibré non intégrable. **57** #3459

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Girbau, Joan Fibrés seminégatifs sur une variété kählérienne et le principe du maximum. **50** #7597

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32L10 Sheaves and cohomology of sections of holomorphic vector bundles [See also 18F40, 55B30.]

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Aomoto, Kazuhiko Equations aux différences linéaires et les intégrales des fonctions multiformes. I. Théorème d'existence. 58 #22688a
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Brasselet, Jean-Paul Ordre de multiplicité locale et classes de Chern. 49 #10927
  Une généralisation de la formule de Riemann-Hurwitz. 50 #13622
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Elencwajg, Georges Les fibrés uniformes de rang 3 sur $\mathbf{P}_2(\mathrm{C})$ sont homogènes. 58 #1278
Gauduchon, Paul Sur les formes satisfaisant les conditions de Neumann sur une variété kählérienne hyper-q-convexe. 57 #6527
  Fibrés hermitiens à endomorphisme de Ricci non négatif. 58 #6375
Gaveau, Bernard Intégrales harmoniques non abéliennes. (English summary) 58 #11529
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Golovin, V. D. Analytic differential forms on complex spaces. (Russian) 46 #5677
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Grauert, Hans (*with* Schneider, Michael) Komplexe Unterräume und holomorphe Vektorraumbündel vom Rang zwei. 58 #1279
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(*with* Wolf, Joseph A.) Poincaré series and automorphic cohomology on f domains. (56 #5955)
Wolf, Joseph A. *See* **Wells, R. O., Jr.**, (56 #5955) *and* **Wells, R. O., Jr.**, (56 #892
Žarkovskaja, N. A. The Siegel operator and Hecke operators. (Russian) (50 #2082)

32N15 Automorphic functions in symmetric domains

Baily, Walter L. Jr. Eisenstein series on tube domains. 50 #13625
★Introductory lectures on automorphic forms. 51 #5982
On the Fourier coefficients of certain Eisenstein series on the adele gro 51 #3562
Grosche, Jürgen Über die Fundamentalgruppen von Quotientenräumen Siegelscher Modulgruppen. 53 #8518
Iyanaga, Kenichi Cusps of certain symmetric bounded domains. 52 #6046
Lachaud, Gilles Spectral analysis of automorphic forms on rank one groups by perturbation methods. 49 #3232
Resnikoff, H. L. On a class of linear differential equations for automorphic forms several complex variables. 49 #3233
Rossi, H. (*with* Vergne, Michèle) Fonctions holomorphes de carré sommable sur domaine de Siegel et étude de la série discrète holomorphe. 46 #401
Satake, Ichirô Mountjoy's abelian varieties attached to a holomorphic immersion. 50 #13626
On the arithmetic of tube domains (blowing-up of the point at infinity). 48 #8861
Vergne, Michèle *See* **Rossi, H.**, 46 #401
Wolf, Joseph A. Remark on Siegel domains of type III. 45 #2204

Secondary classifications:

Arthur, James The Selberg trace formula for groups of F-rank one. (50 #12920)
Baily, Walter L. Jr. Fourier coefficients of Eisenstein series on the Adele gro (53 #2840)
Gangolli, Ramesh Spectra of discrete uniform subgroups of semisimple Lie grou (55 #12869)
Greenfield, Stephen J. (*with* Wallach, Nolan R.) Automorphism groups of bound domains in Banach spaces. (45 #5420)
Hemperly, John C. The parabolic contribution to the number of linearly independ automorphic forms on a certain bounded domain. (53 #11110)
Hurt, Norman E. Proof of an analogue of a conjecture of Langlands for the "Heisenberg-Weyl" group. (48 #8691)
Karel, Martin L. Fourier coefficients of certain Eisenstein series. (49 #8935)
Kubota, Tomio Some results concerning reciprocity law and real analytic automorp functions. (49 #4976)
Maurin, Krzysztof Der allgemeine Dualitätssatz für automorphe Formen und elliptis Operatoren. (49 #5220)

(*with* Maurin, Lidia) Automorphic forms and Bruhat-Blattner distributions. (Russian summary) (49 #7390)

Maurin, Lidia *See* **Maurin, Krzysztof,** (49 #7390)

Monastyrskiĭ, M. I. (*with* Perelomov, A. M.) Coherent states and bounded homogeneous domains. (Russian) (50 #7417)

Namikawa, Yukihiko A new compactification of the Siegel space and degeneration of polarized Abelian varieties. (Japanese) (58 #16697)

Perelomov, A. M. Coherent states for the Lobačevskiĭ plane. (Russian) (52 #662)
See also **Monastyrskiĭ, M. I.,** (50 #7417)

Pommerening, Klaus Reflections in bounded symmetric domains. (53 #3369)

Semenov-Tjan-Šanskiĭ, M. A. Harmonic analysis on Riemannian symmetric spaces of negative curvature, and scattering theory. (Russian) (52 #11485)

Shalika, Joseph A. Some conjectures in class field theory. (49 #10664)

Shimizu, Hideo Theta series and automorphic forms on GL(2). (51 #10235)

Ts'ao, Liang Chi On Fourier coefficients of Eisenstein series. (48 #6006)
The rationality of the Fourier coefficients of certain Eisenstein series on tube domains. (54 #7388)

Wallach, Nolan R. *See* **Greenfield, Stephen J.,** (45 #5420)

Wells, R. O., Jr. Automorphic cohomology on homogeneous complex manifolds. (57 #6529)

32N99 None of the above, but in this section

Secondary classifications:

Lund, Fernando (*with* Rasetti, Mario; Regge, Tullio) The Ising model and the dimer model on the Lobačevskiĭ plane. (Russian. English summary) (Not reviewed)

Murakami, Shingo ★On automorphisms of Siegel domains. (51 #944)

Nathanson, Melvyn B. On the fundamental domain of a discrete group. (48 #4145)

Rasetti, Mario *See* **Lund, Fernando; et al.,** (Not reviewed)

Regge, Tullio *See* **Lund, Fernando; et al.,** (Not reviewed)

Serre, Jean-Pierre Cohomologie des groupes discrets. (52 #5876)

Ts'ao, Liang Chi Exponential sums over finite simple Jordan algebras and finite simple associative algebras. (51 #383)

33–XX SPECIAL FUNCTIONS [33–XX deals with the properties of functions as functions. General systems of orthogonal functions are treated in 42A52. Expansions in orthogonal functions are treated in 42A56.]

Bateman, Harry (*with* Erdélyi, Arthur) ★Высшие трансцендентные функции. I: Гипергеометрическая функция. Функции Лежандра. (Russian) [Higher transcendental functions. I: The hypergeometric function. Legendre functions] 49 #9265
(*with* Erdélyi, Arthur) ★Высшие трансцендентные функции. Том II. (Russian) [Higher transcendental functions. Vol. II] 50 #7603 (E 54 #3040–3047)

Eilbeck, J. C. Table errata: *Higher transcendental functions. Vol. I, II* (McGraw-Hill, New York, 1953) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. 54 #3040

Emde, F. *See* **Jahnke, E.; et al.,** 56 #3366

Erdélyi, Arthur *See* **Bateman, Harry,** 49 #9265; **Bateman, Harry,** 50 #7603 (E 54 #3040–3047) ; **Robinson, Neville I.,** 52 #14400; **Eilbeck, J. C.,** 54 #3040; **Fettis, Henry E.,** 54 #3041; **Katzin, Martin,** 54 #3042; **Kölbig, K. S.,** 54 #3043; **Satoh, H.,** 54 #3044 *and* **Skovgaard, Ove,** 54 #3045

Fettis, Henry E. Table erratum: *Higher transcendental functions, Vol. I, II* (McGraw-Hill, New York, 1953) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. Tricomi. 54 #3041

Jahnke, E. (*with* Emde, F.; Lösch, F.) ★Специальные функции: Формулы, графики, таблицы. (Russian) [Special functions: Formulae, graphs, tables] 56 #3366

Katzin, Martin Table errata: *Higher transcendental functions, Vol. I, II* (McGraw-Hill, New York, 1953) by A. Erdélyi, W. Magnus, F. Oberhettinger, and F. G. Tricomi. 54 #3042
Table errata: *Formulas and theorems for the special functions of mathematical physics* (third edition of English translation, Springer, New York, 1966) by W. Magnus, F. Oberhettinger and R. P. Soni. 54 #3046

Kölbig, K. S. Table errata: *Higher transcendental functions, Vol. I, II* (McGraw-Hill, New York, 1953) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. 54 #3043

Lavoie, J.-L. *See* **Srivastava, Hari M.,** 53 #13665

Lebedev, N. N. ★Special functions and their applications. 50 #2568
★Spezielle Funktionen und ihre Anwendung. 50 #2569

Lösch, F. *See* **Jahnke, E.; et al.,** 56 #3366

(Magnus, Wilhelm) *See* **Robinson, Neville I.,** 52 #14400; **Eilbeck, J. C.,** 54 #3040; **Fettis, Henry E.,** 54 #3041; **Katzin, Martin,** 54 #3042; **Kölbig, K. S.,** 54 #3043; **Satoh, H.,** 54 #3044; **Skovgaard, Ove,** 54 #3045; **Katzin, Martin,** 54 #3046 *and* **Skovgaard, Ove,** 54 #3047

(Oberhettinger, E.) *See* **Skovgaard, Ove,** 54 #3047

(Oberhettinger, Fritz) *See* **Robinson, Neville I.,** 52 #14400; **Eilbeck, J. C.,** 54 #3040; **Fettis, Henry E.,** 54 #3041; **Katzin, Martin,** 54 #3042; **Kölbig, K. S.,** 54 #3043; **Satoh, H.,** 54 #3044; **Skovgaard, Ove,** 54 #3045 *and* **Katzin, Martin,** 54 #3046

Rainville, Earl D. ★Special functions. 52 #14399

Robinson, Neville I. Table errata: *Higher transcendental functions, Vol. II* (McGraw-Hill, New York, 1953) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. 52 #14400

Satoh, H. Table errata: *Higher transcendental functions, Vol. I, II* (McGraw-Hill, New York, 1953) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. 54 #3044

(Sedov, L. I.) *See* **Jahnke, E.; et al.,** 56 #3366

(Silverman, Richard A.) *See* **Lebedev, N. N.,** 50 #2568

Skovgaard, Ove Table erratum: *Higher transcendental functions. Vol. I, II* (McGraw-Hill, New York, 1953) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. 54 #3045
Table erratum: *Formulas and theorems for the special functions of mathematical physics* (third edition of English translation, Springer, New York, 1966) by W. Magnus, E. Oberhettinger and R. P. Soni. 54 #3047

(Soni, Raj Pal) *See* **Katzin, Martin,** 54 #3046 *and* **Skovgaard, Ove,** 54 #3047

Srivastava, Hari M. (*with* Lavoie, J.-L.) A certain method of obtaining bilateral generating functions. 53 #13665

(Stopp, Friedmar) *See* **Lebedev, N. N.,** 50 #2569

(Tolstova, G. V.) *See* **Jahnke, E.; et al.,** 56 #3366

(Tricomi, Francesco Giacomo) *See* **Robinson, Neville I.,** 52 #14400; **Eilbeck, J. C.,** 54 #3040; **Fettis, Henry E.,** 54 #3041; **Katzin, Martin,** 54 #3042; **Kölbig, K. S.,** 54 #3043; **Satoh, H.,** 54 #3044 *and* **Skovgaard, Ove,** 54 #3045

(Vilenkin, N. Ja.) *See* **Bateman, Harry; et al.,** 49 #9265 *and* **Bateman, Harry; et al.,** 50 #7603 (E 54 #3040–3047)

Table errata *See* **Robinson, Neville I.,** 52 #14400; **Eilbeck, J. C.,** 54 #3040; **Fettis, Henry E.,** 54 #3041; **Katzin, Martin,** 54 #3042; **Kölbig, K. S.,** 54 #3043; **Satoh, H.,** 54 #3044; **Skovgaard, Ove,** 54 #3045; **Katzin, Martin,** 54 #3046 *and* **Skovgaard, Ove,** 54 #3047

Tables:
Special functions *See* **Jahnke, E.; et al.,** 56 #3366

Secondary classifications:

(Abramowitz, Milton) *See* **Ninin, Paul,** (52 #15944); **Gautschi, Walter,** (53 #11956); **Björk, Harry,** (54 #4033); **Denman, Harry H.; et al.,** (54 #4034); **Fettis, Henry E.; et al.,** (54 #4035); **Guttman, Lester,** (54 #4036); **McDowell, Robin S.,** (54 #4037); **Skovgaard, Ove,** (54 #4038); **Stein, Josef,** (54 #4039); **Strecok, Anthony J.,** (54 #4040) *and* **Wood, Van E.,** (54 #4041)

Antimirovs, M. The Green's function of a one-dimensional equation of parabolic type when the boundary moves according to the $\beta\sqrt{t}$ law. (Russian) (54 #13315)

Björk, Harry Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D. C., 1964) edited by Milton Abramowitz and Irene A. Stegun. (54 #4033)

Bljumin, S. L. (*with* Šmyrin, A. M.) The generation of the Walsh functions and their generalizations. (Russian) (58 #33479)

Caslin, James C. *See* **Fettis, Henry E.,** (54 #4035)

Delsarte, P. Properties and applications of the recurrence $F(i+1,k+1,n+1) = q^{k+1}F(i,k+1,n) - q^{k}F(i,k,n)$. (54 #107)

Denman, Harry H. (*with* Emaus, B. D.) Erratum: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D.C., 1964) edited by Milton Abramowitz and Irene A. Stegun. (54 #4034)

Emaus, B. D. *See* **Denman, Harry H.,** (54 #4034)

(Erdélyi, Arthur) *See* **Fettis, Henry E.,** (54 #4051); **Katzin, Martin,** (54 #4052); **Nash, J. C.,** (54 #4053) *and* **Wood, Van E.,** (54 #4054)

Fettis, Henry E. (*with* Caslin, James C.) Erratum: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D.C., 1964) edited by Milton Abramowitz and Irene A. Stegun. (54 #4035)
Erratum: *Tables of integral transforms.* Vol. I, II (McGraw-Hill, New York, 1954) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. (54 #4051)

Gautschi, Walter Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D. C., 1964) edited by Milton Abramowitz and Irene A. Stegun. (53 #11956)

Guttman, Lester Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D.C., 1964) edited by Milton Abramowitz and Irene A. Stegun. (54 #4036)

Háčik, Miloš Higher monotonicity properties of zero points of the linear combination of the solution and its first derivative of the differential equation $y'' + q(t)y = 0$. (53 #3422)

(Hayashi, Kenji) *See* **Skovgaard, Ove; et al.,** (50 #15256) *and* **Skovgaard, Ove; et al.,** (50 #15257)

Katzin, Martin Table errata: *Tables of integral transforms. Vol. I, II* (McGraw-Hill, New York, 1954) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. (54 #4052)

(Magnus, Wilhelm) *See* **Fettis, Henry E.,** (54 #4051); **Katzin, Martin,** (54 #4052); **Nash, J. C.,** (54 #4053) *and* **Wood, Van E.,** (54 #4054)

McDowell, Robin S. Erratum: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D.C., 1964) edited by Milton Abramowitz and Irene A. Stegun. (54 #4037)

Nash, J. C. Table errata: *Tables of integral transforms, Vol. I, II* (McGraw-Hill, New York, 1954) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. (54 #4053)

Ninin, Paul Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D.C., 1964) edited by Milton Abramowitz and Irene A. Stegun. (52 #15944)

Oberhettinger, Fritz ★Fourier expansions. A collection of formulas. (50 #5372)
See also **Fettis, Henry E.,** (54 #4051); **Katzin, Martin,** (54 #4052); **Nash, J. C.,** (54 #4053) *and* **Wood, Van E.,** (54 #4054)

Olver, Frank W. J. Unsolved problems in the asymptotic estimation of special functions. (52 #14784)

Petersen, Mogens Helmer *See* **Skovgaard, Ove,** (50 #15256) *and* **Skovgaard, Ove,** (50 #15257)

Skovgaard, Ove Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D. C., 1964). (54 #4038)
(*with* Petersen, Mogens Helmer) Table erratum: *Tafeln für die Differenzenrechnung sowie für die Hyperbel-Besselschen, elliptischen und anderen Funktionen* (Springer, Berlin, 1933) by K. Hayashi. (50 #15256)
(*with* Petersen, Mogens Helmer) Table erratum: *Tafeln der Besselschen Theta-, Kugel- und anderer Funktionen* (Springer, Berlin, 1930) by K. Hayashi. (50 #15257)

Šmyrin, A. M. *See* **Bljumin, S. L.,** (58 #33479)

(Stegun, Irene A.) *See* **Ninin, Paul,** (52 #15944); **Gautschi, Walter,** (53 #11956); **Björk, Harry,** (54 #4033); **Denman, Harry H.; et al.,** (54 #4034); **Fettis, Henry E.; et al.,** (54 #4035); **Guttman, Lester,** (54 #4036); **McDowell, Robin S.,** (54 #4037); **Skovgaard, Ove,** (54 #4038); **Stein, Josef,** (54 #4039); **Strecok, Anthony J.,** (54 #4040) *and* **Wood, Van E.,** (54 #4041)
Stein, Josef Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D.C., 1964) edited by Milton Abramowitz and Irene A. Stegun. (54 #4039)
Strecok, Anthony J. Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D. C., 1964) edited by Milton Abramowitz and Irene A. Stegun. (54 #4040)
(Tricomi, Francesco Giacomo) *See* **Fettis, Henry E.,** (54 #4051); **Katzin, Martin,** (54 #4052); **Nash, J. C.,** (54 #4053) *and* **Wood, Van E.,** (54 #4054)
Walter, H. G. Lamé functions of the first kind generated by computer. (46 #8386)
Wood, Van E. Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D.C., 1964) edited by M. Abramowitz and I. A. Stegun. (54 #4041)
Table errata: *Tables of integral transforms, Vol. I, II* (McGraw-Hill, New York, 1954) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. (54 #4054)
Handbook:
Mathematical functions with formulas, graphs and mathematical tables *See* **Ninin, Paul,** (52 #15944); **Gautschi, Walter,** (53 #11956); **Björk, Harry,** (54 #4033); **Denman, Harry H.; et al.,** (54 #4034); **Fettis, Henry E.; et al.,** (54 #4035); **Guttman, Lester,** (54 #4036); **McDowell, Robin S.,** (54 #4037); **Skovgaard, Ove,** (54 #4038); **Stein, Josef,** (54 #4039); **Strecok, Anthony J.,** (54 #4040) *and* **Wood, Van E.,** (54 #4041)
Table errata *See* **Skovgaard, Ove; et al.,** (50 #15256); **Skovgaard, Ove; et al.,** (50 #15257); **Ninin, Paul,** (52 #15944); **Gautschi, Walter,** (53 #11956); **Björk, Harry,** (54 #4033); **Denman, Harry H.; et al.,** (54 #4034); **Fettis, Henry E.; et al.,** (54 #4035); **Guttman, Lester,** (54 #4036); **McDowell, Robin S.,** (54 #4037); **Skovgaard, Ove,** (54 #4038); **Stein, Josef,** (54 #4039); **Strecok, Anthony J.,** (54 #4040); **Wood, Van E.,** (54 #4041); **Fettis, Henry E.,** (54 #4051); **Katzin, Martin,** (54 #4052); **Nash, J. C.,** (54 #4053) *and* **Wood, Van E.,** (54 #4054)

33–01 Elementary exposition (collegiate level)

Carlson, Billie Chandler ★Special functions of applied mathematics. **58** #28707
Higgins, Theodore Parker A child's garden of special functions. **57** #16720
Janić, Radovan R. *See* **Mitrinović, Dragoslav S.; et al., 50** #7602 *and* **Mitrinović, Dragoslav S., 55** #10735
Labazin, V. G. (*with* Vinogradova, A. E.) ★Специальные функции. (Russian) [Special functions] **50** #5040
Markuševič, A. I. ★Curvas maravillosas. (Spanish) [Remarkable curves] **57** #6530
Mitrinović, Dragoslav S. ★Uvod u specijalne funkcije. (Serbo-Croatian) [Introduction to special functions] **50** #7601
(*with* Tošić, Dobrilo Đ.; Janić, Radovan R.) ★Specijalne funkcije. (Serbo-Croatian) [Special functions] **50** #7602
(*with* Janić, Radovan R.) ★Uvod u specijalne funkcije. (Serbo-Croatian) [Introduction to special functions] **55** #10735
Tošić, Dobrilo Đ. *See* **Mitrinović, Dragoslav S.; et al., 50** #7602
(Vega, Carlos) *See* **Markuševič, A. I., 57** #6530
Vinogradova, A. E. *See* **Labazin, V. G., 50** #5040

Secondary classifications:

Arsenin, V. Ja. ★Методы математической физики и специальные функции. (Russian) [Methods of mathematical physics and special functions] (**50** #15483)
Galicyn, A. S. (*with* Žukovskiĭ, A. N.) ★Интегральные преобразования и специальные функции в задачах теплопроводности. (Russian) [Integral transforms and special functions in heat conduction problems] (See **RŽMat 1976** #8 B19K)
Lukaševič, D. ★Теория поля и специальные функции. (Russian) [Field theory and special functions] (**51** #816)
Žukovskiĭ, A. N. *See* **Galicyn, A. S.,** (See **RŽMat 1976** #8 B19K)

33–02 Advanced exposition (research surveys, etc.)

Askey, Richard A. ★Orthogonal polynomials and special functions. **58** #1288
Bell, W. W. ★Special functions for scientists and engineers. **46** #2087a
★Fonctions spéciales à l'usage des chercheurs et ingénieurs. **46** #2087b
Gasper, George Positivity and special functions. **54** #619
Higgins, John Rowland ★Completeness and basis properties of sets of special functions. **58** #17240
Hochstadt, Harry ★The functions of mathematical physics. **58** #17241
(Kotliar, Vladimir) *See* **Nikiforov, A. F.; et al., 57** #731
Lavoie, J.-L. (*with* Osler, Thomas J.; Tremblay, Richard) Fractional derivatives and special functions. **53** #13666
Ljusternik, L. A. New works on the probabilistic theory of special functions. (Russian) **58** #11534
Nikiforov, A. F. (*with* Uvarov, V. B.) ★Основы теории специальных функций. (Russian) [Foundations of the theory of special functions] **57** #730
(*with* Uvarov, V. B.) ★Éléments de la théorie des fonctions spéciales. **57** #731
Osler, Thomas J. *See* **Lavoie, J.-L.; et al., 53** #13666
(Samarskiĭ, A. A.) *See* **Nikiforov, A. F.; et al., 57** #730
Tremblay, Richard *See* **Lavoie, J.-L.; et al., 53** #13666
Tricomi, Francesco Giacomo Sulla didattica delle funzioni speciali. **46** #9399
Uvarov, V. B. *See* **Nikiforov, A. F., 57** #730 *and* **Nikiforov, A. F., 57** #731

Secondary classifications:

Carlitz, Leonard Permutations, sequences and special functions. (**51** #7891)
Denman, Harry H. Table errata: *Integraltafel, Erster Teil: Unbestimmte Integrale* (third edition, Springer, Vienna, 1961) by W. Gröbner and N. Hofreiter. (**53** #4453)
Fettis, Henry E. Table errata: *Formeln und Sätze für die speziellen Funktione* *mathematischen Physik* (second edition, Springer, Berlin, 1948) by W. Magnus Oberhettinger. (**53** #4457)
(Gröbner, Wolfgang) *See* **Denman, Harry H.,** (**53** #4453)
Henrici, Peter ★Applied and computational complex analysis. Vol. 2. (**56** #1223
(Hofreiter, N.) *See* **Denman, Harry H.,** (**53** #4453)
Lorch, Lee Elementary comparison techniques for certain classes of Sturm-Lio equations. (**58** #11644)
(Magnus, Wilhelm) *See* **Fettis, Henry E.,** (**53** #4457); **Satoh, H.,** (**53** #4467); **Van E.,** (**53** #4472) *and* **Pexton, Robert L.,** (**58** #3292)
(Oberhettinger, Fritz) *See* **Fettis, Henry E.,** (**53** #4457); **Satoh, H.,** (**53** #4467); **Wood, Van E.,** (**53** #4472) *and* **Pexton, Robert L.,** (**58** #3292)
Pexton, Robert L. Table errata: *Formulas and theorems for the special functio* *mathematical physics* (Springer, New York, 1966) by W. Magnus, F. Oberhett and R. P. Soni. (**58** #3292)
Satoh, H. Table errata: *Formulas and theorems for the special functions of mathem* *physics* (third edition of the English translation, Springer, New York, 1966) b Magnus, F. Oberhettinger and R. P. Soni. (**53** #4467)
(Sislian, Jean) *See* **Smirnov, V. I.,** (**53** #3268)
Smirnov, V. I. ★Cours de mathématiques supérieures. Tome III. Deuxième p (**53** #3268)
(Soni, Raj Pal) *See* **Satoh, H.,** (**53** #4467); **Wood, Van E.,** (**53** #4472) *and* **Pe** **Robert L.,** (**58** #3292)
Wood, Van E. Table errata: *Formulas and theorems for the special functions of mathematical physics* (third edition of the English translation, Springer, New 1966) by W. Magnus, F. Oberhettinger and R. P. Soni. (**53** #4472)
Table errata *See* **Denman, Harry H.,** (**53** #4453); **Fettis, Henry E.,** (**53** #4457); **S** **H.,** (**53** #4467); **Wood, Van E.,** (**53** #4472) *and* **Pexton, Robert L.,** (**58** #3292

33–03 Historical

Secondary classifications:

Braaksma, B. L. J. In memoriam C. S. Meijer. (**51** #10009)
(Euler, Leonhard) *See* **Slavutin, E. I.,** (**58** #21187)
Kurdjumova, A. I. The extraordinary Cauchy integrals. (Russian) (**58** #21217)
(Meijer, C. S.) *See* **Braaksma, B. L. J.,** (**51** #10009)
Slavutin, E. I. Euler's works on elliptic integrals. (Russian) (**58** #21187)
Bibliography:
Meijer, C. S. *See* **Braaksma, B. L. J.,** (**51** #10009)
Obituary:
Meijer, C. S. *See* **Braaksma, B. L. J.,** (**51** #10009)

33–04 Explicit machine computation and programs (not the theory computation or programming)

Slavić, Dušan V. Reciprocal transformations of potential and Čebyšev's developme **50** #13627

Secondary classifications:

Luke, Yudell L. ★Algorithms for the computation of mathematical functions. (**58** #13624)

33–06 Collections of papers; proceedings of conferences

(Askey, Richard A.) *See* **Theory and application of special functions, 52** #819
Seminar:
Theory and Application of Special Functions *See* **Theory and application of spe functions, 52** #819
Special functions *See* **Theory and application of special functions, 52** #819
Theory and application of special functions ★Theory and application of special functions. **52** #819

Secondary classifications:

(Ludwig, Donald) *See* **Studies in applied mathematics,** (**54** #12426)
(Olver, Frank W. J.) *See* **Studies in applied mathematics,** (**54** #12426)
Special functions and wave propagation *See* **Studies in applied mathematics,** (**54** #12426)
Studies in applied mathematics ★Studies in applied mathematics. 6: Special functi and wave propagation. (**54** #12426)
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Special Functions *See* **Studies in applied mathematics,** (**54** #12426)
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Wave propagation *See* **Studies in applied mathematics,** (**54** #12426)

33A10 Exponential and trigonometric functions

Abdelfattah, M. A. *See* **Simary, M. A., 57** #3463
Abdelkader, Mostafa A. A class of trigonometric identities. **46** #9400
Askey, Richard A. Inequalities via fractional integration. **58** #1289
Bach, G. Über die Summierung von Kosekantenreihen mit Hilfe des Residuensat **51** #5983
Bajič, Branko Note on an improper integral. **55** #10736
Battioni, Giacomino Su una generalizzazione delle funzioni iperboliche e delle funz circolari. (English summary) **45** #599
Burkart, A. R. *See* **Siewert, C. E., 48** #2433
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Carlson, Billie Chandler Invariance of an integral average of a logarithm. **50** #1362

Cepák, Karel A general formula for the transformation of a product of cosines of n numbers into a sum of cosines. (Czech) **50** #5041

Cheng, M. C. On a class of integrals expressible in terms of $\arcsin(x),\mathrm{Li}_2(x)$ and $\mathrm{Li}_2(r,\theta)$. **46** #3841

Ching, Chin Hung (*with* Chui, Charles K.) Delange's characterization of the sine function. **50** #13629

Chui, Charles K. *See* **Ching, Chin Hung, 50** #13629

Crouzeix, Michel (*with* Ruamps, Françoise) On rational approximations to the exponential. **56** #12345

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Eberlein, W. F. On Euler's infinite product for the sine. **55** #3345

Fog, David Remark on an apropos. (Danish. English summary) **48** #580

Glasser, M. Lawrence Generalization of a definite integral of Ramanujan. **51** #3563

Evaluation of a class of definite integrals. **53** #3370

Grosjean, C. C. Errata: "Some new integrals arising from mathematical physics. III" (Simon Stevin **43** (1969/70), 3–46). **54** #3048

Some new integrals arising from mathematical physics. IV. **54** #3049

Hadži, P. I. Integrals containing the Fresnel functions $S(x)$ and $C(x)$. (Russian) **53** #13667

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Jagers, A. A. Problem 73-21, "A sine inequality", by R. A. Askey. **50** #10335

Janić, Radovan R. (*with* Mitrović, Žarko M.) Bernoulli and Euler polynomials in k variables. **48** #6478

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Joyce, G. S. On the simple cubic lattice Green function. **58** #28708

Karpyčeva, Z. F. A certain property of the exponential integral function and its repeated integrals. (Russian) **46** #3842

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On summation of series of hyperbolic functions. II. **51** #946

Meinardus, Günter Über ein Problem von L. Collatz. (English summary) **45** #2213

Mitrović, Žarko M. *See* **Janić, Radovan R., 48** #6478

Ozawa, Mitsuru On a characterization of the exponential function and the cosine function by factorization. **57** #12921

Peljuh, G. P. (*with* Šarkovs′kiĭ, O. M.) A characterization of elementary and special functions by means of functional relations. (Ukrainian. English and Russian summaries) **48** #11585

Raab, Werner Über die Nullstellen der Hyperbelfunktionen dritter Ordnung. **51** #8485

Ruamps, Françoise *See* **Crouzeix, Michel, 56** #12345

Ruscheweyh, Stephan Einige neue Darstellungen des Di- und Trilogarithmus. **48** #4358

Sankar, P. B. K. A generalisation of Anger and Bourget functions. **47** #8913

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Soni, N. K. *See* **Singhal, J. P., 58** #28709

Srivastava, Triloki Nath Some theorems on generalized Bateman K-function. **49** #638

Stepanec′, O. Ī. *See* **Dzjadik, V. K., 45** #2212

Takahashi, Shin-ichi *See* **Ikeda, Makoto, 50** #5042

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Ling, Chih Bing Generalization of certain summations due to Ramanujan. (**57** #6935)

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Sedleckiĭ, A. M. Complete and uniformly mimimal systems of exponential functions in $L^p(-\pi,\pi)$. (Russian) (**49** #5697)

Excesses of systems of exponential functions. (Russian) (**57** #17111)

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Tavathia, B. S. Certain theorems in operational calculus involving integrals containing hyperbolic functions. (**46** #4120)

(Thompson, Rory O. R. Y.) *See* **Russell, W.; et al.,** (**53** #4497)

33A15 Gamma and beta functions

Agrawal, B. M. (*with* Singhal, B. M.) A new duplication formula for $\Gamma(2rz)$. (Hindi. English summary) **56** #685

Banerjee, Tulshi Das A note on incomplete gamma function. **52** #8510

Bank, Steven B. (*with* Kaufman, Robert P.) An extension of Hölder's theorem concerning the gamma function. **54** #7880

(*with* Kaufman, Robert P.) A note on Hölder's theorem concerning the gamma function. **57** #16721

Berg, Lothar Zur Abschätzung des Restgliedes in der asymptotischen Entwicklung des Exponentialintegrals. **57** #16722

Boese, G. Eine majorante asymptotische Abschätzung für die unvollständige Gammafunktion. **52** #8511

Chaturvedi, K. K. (*with* Goyal, A. N.) Integrals involving A^* function. **55** #10737

Czajkowski, G. Z. Generalized gamma functions and their application in classical information thermodynamics. (Russian summary) **48** #4359

Dahiya, R. S. Application of gamma functions to evaluate certain integrals. **50** #13630

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Fields, Jerry L. The uniform asymptotic expansion of a ratio of gamma functions. **53** #3371

Flett, Thomas Muirhead Some inequalities for a hypergeometric integral. **47** #5308

Gautschi, Walter A harmonic mean inequality for the gamma function. **50** #2570

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Gebhardt, F. Eine semi-konvergente Reihe für die logarithmische Ableitung der Gamma-Funktion. **52** #8512

Goyal, A. N. *See* **Chaturvedi, K. K., 55** #10737

Grossman, Nathaniel Polygamma functions of arbitrary order. **53** #13668 (E **57** #6531)

Errata: "Polygamma functions of arbitrary order" (SIAM J. Math. Anal. 7 (1976), no. 3, 366–372). **57** #6531

Kairies, Hans-Heinrich Convexity in the theory of the gamma function. **58** #6379

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Kečkić, Jovan D. (*with* Vasić, Petar M.) Some inequalities for the gamma function. **46** #7560

(*with* Stanković, Miomir S.) Some inequalities for special functions. **48** #6479

Kornilov, V. E. Calculation of the gamma function by means of continued fractions. (Russian) **58** #11535

Kozarov, Marin (*with* Mladenov, Kosta) Solution of certain elliptic integrals. (Bulgarian) **58** #22693

Kurepa, Đuro Left factorial function in complex domain. **50** #10336

Lazarević, Ilija B. (*with* Lupaş, Alexandru) Functional equations for Wallis and gamma functions. **50** #13631 (EA **52**)

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Mitsui, Takayoshi $\Gamma_\alpha(s,x)$ and special functions. (Japanese) **58** #1290

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Muldoon, Martin E. Some characterizations of the gamma function involving the notion of complete monotonicity. **47** #3715

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Palacardo, Maria Concetta *See* **Valenti, Santi, 58** #1291

Ramshaw, Lyle Binomial coefficients with non-integral lower index. **56** #12346

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On the left factorial function of the complex argument. **50** #10337

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Stanković, Miomir S. *See* **Kečkić, Jovan D., 48** #6479

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Polonskaja, K. V. The calculation of a smooth function of two variables that takes on the values C_m^n at the entire points (m,n), $m>n$. (Russian) (**58** #29591)

Reyssat, Éric Mesures de transcendance de nombres liés aux fonctions exponentielles et elliptiques. (English summary) (**58** #16552)

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Sethi, P. L. *See* **Saxena, Ram Kishore,** (**54** #13502)

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Weil, André ★Эллиптические функции по Эйзенштейну и Кронекеру. (Russian) [Elliptic functions according to Eisenstein and Kronecker] (**58** #27769b)

33A20 Error function, probability integral

Bajič, Branko On the power expansion of the inverse of the error function. **50** #7604

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Mukunda, H. S. Evaluation of some definite integrals involving repeated integrals of error functions. **50** #13632

Secondary classifications:

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Frank, Evelyn Continued fraction expansions for the ratios of hypergeometric functions evaluated on computers. (**51** #11931)

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33A25 Elliptic functions and integrals

Anderson, Glen D. (*with* Vamanamurthy, M. K.) Affine mappings and elliptic functions. **46** #7561

Andrews, George E. Problem 73-22, "A pair of theta function identities", by L. Carlitz. **50** #5043

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Carlson, Billie Chandler Elliptic integrals of the first kind. **55** #3346

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(Cayley, Arthur) *See* **Skovgaard, Ove, 55** #8423

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Hioe, F. T. A Green's function for a cubic lattice. **58** #11537

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Schett, Alois Recurrence formula of the Taylor series expansion coefficients of the Jacobian elliptic functions. **56** #687

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Gross, Benedict H. On the periods of Abelian integrals and a formula of Chowla Selberg. (**58** #701)

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(Milne-Thomson, L. M.) *See* **Skovgaard, Ove,** (**49** #8268)

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33A30 Hypergeometric functions of one and several variables, generalizations

Abdi, Wazir Hasan A quasi-Kummer function. **46** #7562

Abiodun, R. F. A. (*with* Sharma, Bhagirath Lal) Summation of series involving generalized hypergeometric functions of two variables. (Serbo-Croatian summa **46** #7563

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(*with* Kalnins, E. G.; Miller, Willard, Jr.) Lie theory and separation of variables. VII. The harmonic oscillator in elliptic coordinates and Ince polynomials. (**51** #8593h)

(*with* Kalnins, E. G.; Miller, Willard, Jr.) Symmetry and separation of variables for the Helmholtz and Laplace equations. (**52** #14600)

Chatterjea, Santi Kumar (*with* Saha, Bibhuti Bhusan) Quelques fonctions génératrices des polynômes de Gegenbauer, du point de vue des groupes de Lie. (English summary) (**55** #5923)

Clerc, Jean-Louis Une formule asymptotique du type Mehler-Heine pour les zonoles d'un espace riemannien symétrique. (**54** #13476)

De Meyer, H. E. (*with* Vanden Berghe, G.) A general set of relations involving 3-j symbols. (**58** #11249)

Folland, Gerald B. Spherical harmonic expansion of the Poisson-Szegő kernel for the ball. (**51** #6273)

Frota-Mattos, Luis A. The complex-analytic extension of the Fourier series on Lie groups. (**57** #17126)

Gazeau, J. P. Une identité du binôme et les représentations linéaires finies de $M_p(K)$ et GL(p, K). (**58** #915)

Gelbart, Stephen S. Harmonics on Stiefel manifolds and generalized Hankel transforms. (**58** #1021)

Bessel functions, representation theory, and automorphic functions. (**49** #9119)

A theory of Stiefel harmonics. (**54** #13474 (EA **55**/**56**))

Gross, Kenneth I. (*with* Kunze, Ray A.) Generalized Bessel transforms and unitary representations. (**49** #9120)

(*with* Kunze, Ray A.) Bessel functions and representation theory. I. (**54** #3305)

(*with* Holman, Wayne J., III; Kunze, Ray A.) The generalized gamma function, new Hardy spaces, and representations of holomorphic type for the conformal group. (**55** #8250)

Grünbaum, F. Alberto A new kind of inequality for Bessel functions. (**47** #5316)

Holman, Wayne J., III *See* **Gross, Kenneth I.; et al.**, (**55** #8250)

Hua, Yang A decomposition of the Fourier transform on the space of 2×2 Hermitian matrices. (**57** #10367)

Hudjakova, G. I. *See* **Vilenkin, N. Ja.; et al.**, (**58** #1048)

Ikeda, Mineo (*with* Miyachi, Yoshihiko) On the symmetry of Hamiltonian systems and the unified treatment of special functions. (**52** #16212)

Jain, Sunita Generating functions for Laguerre polynomial. (**53** #13682)

Kalnins, E. G. (*with* Miller, Willard, Jr.) Lie theory and separation of variables. III. The equation $f_{tt}-f_{ss}=\gamma^2f$. (**51** #8593c (E **51** #8593d))

(*with* Miller, Willard, Jr.) Lie theory and separation of variables. IV. The groups SO(2, 1) and SO(3). (**51** #8593e)

(*with* Miller, Willard, Jr.) Lie theory and separation of variables. V. The equations $iU_t-U_{xx}=0$ and $iU_t+U_{xx}-(c/x^2)U=0$. (**51** #8593f)

(*with* Miller, Willard, Jr.) Erratum: "Lie theory and separation of variables. III. The equation $f_{tt}-f_{ss}=\gamma^2f$". (J. Mathematical Phys. **15** (1974), 1025–1032). (**51** #8593d)

(*with* Miller, Willard, Jr.) Lie theory and the wave equation in space-time. I. The Lorentz group. (**58** #22421a)

(*with* Miller, Willard, Jr.) Lie theory and the wave equation in space-time. III. Semisubgroup coordinates. (**58** #22421c)

(*with* Miller, Willard, Jr.) Lie theory and the wave equation in space-time. IV. The Klein-Gordon equation and the Poincaré group. (**58** #22421d)

(*with* Miller, Willard, Jr.) Lie theory and the wave equation in space-time. V. R-separable solutions of the wave equation $\psi_{tt}-\Delta_3\psi=0$. (**58** #22421e)

(*with* Miller, Willard, Jr.) Lie theory and the wave equation in space-time. II. The group SO(4, C). (**58** #22421b)

See also **Boyer, Charles P.; et al.**, (**51** #8593g); **Boyer, Charles P.; et al.**, (**51** #8593h) *and* **Boyer, Charles P.; et al.**, (**52** #14600)

(Kolman, Bernard) *See* **Lie algebras: applications and computational methods**, (**47** #6793) *and* **Lie algebras: applications and computational methods**, (**50** #7269)

Koornwinder, Tom H. Positivity proofs for linearization and connection coefficients of orthogonal polynomials satisfying an addition formula. (**58** #12175)

Kostin, V. M. Certain invariant solutions of equations of the Korteweg-de Vries type. (Russian) (**45** #3975)

Kravčenko, Fedor G. Elementary K_{ml}-functions and their properties. (Russian. English summary) (**46** #5590)

Kunze, Ray A. *See* **Gross, Kenneth I.**, (**49** #9120); **Gross, Kenneth I.**, (**54** #3305) *and* **Gross, Kenneth I.; et al.**, (**55** #8250)

Lawton, Wayne Representations of the universal covering group of SL(2, R) and Hermite functions. (Arabic summary) (**57** #9914)

Miller, Willard, Jr. Lie theory and separation of variables. I. Parabolic cylinder coordinates. (**51** #8593a)

Lie theory and separation of variables. II. Parabolic coordinates. (**51** #8593b)

See also **Kalnins, E. G.**, (**51** #8593c (E **51** #8593d)); **Kalnins, E. G.**, (**51** #8593d); **Kalnins, E. G.**, (**51** #8593e); **Kalnins, E. G.**, (**51** #8593f); **Boyer, Charles P.; et al.**, (**51** #8593g); **Boyer, Charles P.; et al.**, (**51** #8593h); **Boyer, Charles P.; et al.**, (**52** #14600); **Kalnins, E. G.**, (**58** #22421a); **Kalnins, E. G.**, (**58** #22421b); **Kalnins, E. G.**, (**58** #22421c); **Kalnins, E. G.**, (**58** #22421d) *and* **Kalnins, E. G.**, (**58** #22421e)

Miyachi, Yoshihiko *See* **Ikeda, Mineo**, (**52** #16212)

Paranuk, V. I. *See* **Vilenkin, N. Ja.**, (**57** #12793)

Pavljuk, A. P. Special functions and representations of block-triangular groups. (Russian) (**58** #28300)

See also **Vilenkin, N. Ja.**, (**57** #12779)

Peetre, Jaak A remark on generalized translation operators (Delsarte-Levitan operators). (**52** #5873)

Pham-Ngoc Dinh, Alain Les groupes SO(n) et E(n) et les fonctions généralisées de L d'ordre ($n-2$). (English summary) (**58** #22420)

Rno, Jung Sik Clebsch-Gordan coefficients and special functions related to the Euclidean group in three-space. (**52** #8533)

Rozenbljum, L. V. Differential equations for the matrix elements of representations groups of motions of spaces of constant curvature. (Russian) (**51** #13145)

Saha, Bibhuti Bhusan *See* **Chatterjea, Santi Kumar**, (**55** #5923)

Šapiro, R. L. *See* **Vilenkin, N. Ja.; et al.**, (**58** #1048)

Šleĭnikova, M. A. Matrix elements of the irreducible representations of the gr SU(2, 1) and a generalized hypergeometric function. (Russian) (**58** #16976)

Strichartz, Robert S. A noncompact analogue of spherical harmonics. (**49** #9545)

Takahashi, Reiji Fonctions sphériques dans les groupes Sp(n, 1). (**51** #1298)

Todorov, I. T. *See* **Bargmann, Valentine**, (**58** #6085)

Vanden Berghe, G. *See* **De Meyer, H. E.**, (**58** #11249)

Venkatesh, K. Symmetries of the 3j coefficient. (**58** #25498)

Vilenkin, N. Ja. (*with* Paranuk, V. I.) A group theoretic study of a certain class generalized Bessel functions of a matrix argument. (Russian) (**57** #12793)

Matrix elements of the irreducible unitary representations of the group U(n), a generalized Jacobi polynomials. (Russian) (**58** #16995)

(*with* Pavljuk, A. P.) Some integrals of a matrix argument. (Russian) (**57** #12779)

(*with* Hudjakova, G. I.; Šapiro, R. L.) Generalized Jacobi polynomials and th limit values. (Russian) (**58** #1048)

Conference:

Lie Algebras: Applications and Computational Methods *See* **Lie algebras: applications and computational methods**, (**47** #6793) *and* **Lie algebras: applications and computational methods**, (**50** #7269)

Lie algebras: applications and computational methods ★Lie algebras: applications a computational methods. (**47** #6793)

★Lie algebras: applications and computational methods. (**50** #7269)

34–XX ORDINARY DIFFERENTIAL EQUATIONS

(Alekseev, V. M.) *See* **Hartman, Philip**, **50** #5061

Cesari, Lamberto ★Asymptotic behavior and stability problems in ordinary differenti equations. **50** #2582

(Egorov, Ju. V.) *See* **Hartman, Philip**, **50** #5061

(Fomin, S. V.) *See* **Kamke, E.**, **54** #3061 *and* **Kamke, E.**, **54** #3062

Hartman, Philip ★Обыкновенные дифференциальные уравнения. (Russian) [Ordina differential equations] **50** #5061

(Kamke, Detlef) *See* **Kamke, E.**, **57** #6549

Kamke, E. ★Справочник по обыкновенным дифференциальным уравнениям. (Russian) [Manual of ordinary differential equations] **54** #3061

★Справочник по обыкновенным дифференциальным уравнениям. (Russia [Manual of ordinary differential equations] **54** #3062

★Differentialgleichungen. **57** #6549

(Mitrinović, Dragoslav S.) *See* **Kamke, E.**, **54** #3061 *and* **Kamke, E.**, **54** #3062

(Rozov, N. H.) *See* **Kamke, E.**, **54** #3061 *and* **Kamke, E.**, **54** #3062

(Sabitov, I. H.) *See* **Hartman, Philip**, **50** #5061

(Zbornik, J.) *See* **Kamke, E.**, **54** #3061 *and* **Kamke, E.**, **54** #3062

Secondary classifications:

Castaing, Charles Version aléatoire du problème de rafle par un convexe variabl (**50** #14930)

Howes, Frederick A. Differential inequalities and applications to nonlinear singul perturbation problems. (**52** #11220)

34–01 Elementary exposition (collegiate level)

Arnol'd, V. I. ★Ordinary differential equations. **58** #22707

Baĭnov, Drumi D. (*with* Konstantinov, Mihail M.) ★Методът на усредняването неговото приложение в техниката. (Bulgarian) [The method of averaging and application in engineering] **48** #8904

Barrett, John H. (*with* Bradley, John S.) ★Ordinary differential equations. **57** #655

Bauhoff, Eugen Peter Methoden der linearen Algebra in der Analysis—ein Beispiel. **54** #7917a

Methoden der linearen Algebra in der Analysis—ein Beispiel. II. **54** #7917b

Bedient, Phillip E. *See* **Rainville, Earl D.**, **49** #9292 *and* **Rainville, Earl D.**, **49** #92

(Boella, M. L.) *See* **Temi di esame di analisi matematica**, **50** #5063

Bogdanov, Ju. S. ★Лекции по дифференциальным уравнениям. (Russian) [Lectur on differential equations] **58** #1314

Bradley, John S. *See* **Barrett, John H.**, **57** #6550

Braun, Martin ★Differential equations and their applications. **57** #3483a

★Differential equations and their applications. **57** #3483b

Braun, Willis H. *See* **Goldstein, Marvin E.**, **53** #11123

Bräuning, Günter ★Gewöhnliche Differentialgleichungen. **58** #1315

Buck, Ellen F. *See* **Buck, R. Creighton, 52** #14419

Buck, R. Creighton (*with* Buck, Ellen F.) ★Introduction to differential equations. **52** #14419

(Cap, Ferdinand F.) *See* **Kuntzmann, Jean, 50** #2583

Collatz, Lothar ★Differentialgleichungen. **50** #5062

Corduneanu, Constantin ★Principles of differential and integral equations. **55** #12977

Dettman, John W. ★Introduction to linear algebra and differential equations. **50** #10385

Egoršin, P. I. ★Обыкновенные дифференциальные уравнения (в примерах и задачах на приложения). (Russian) [Ordinary differential equations (in applied examples and problems)] **52** #3636

Èl'sgol'c, L. È. ★Differential equations and the calculus of variations. **49** #9291

Erugin, N. P. ★Книга для чтения по общему курсу дифференциальных уравнений. (Russian) [A reader for a general course in differential equations] (See RŽMat **1970** #11 B183K)

  ★Книга для чтения по общему курсу дифференциальных уравнений. (Russian) [A reader for a general course in differential equations] **57** #16749

Filippov, A. F. ★Recueil de problèmes d'équations différentielles. **55** #5935

Goldstein, Marvin E. (*with* Braun, Willis H.) ★Advanced methods for the solution of differential equations. **53** #11123

Gröbner, Wolfgang ★Differentialgleichungen. I. **58** #22708

de Guzmán, Miguel ★Ecuaciones diferenciales ordinarias. (Spanish) [Ordinary differential equations] **57** #10031

  (*with* Peral, Ireneo; Walias Cuadrado, Magdalena) ★Problemas de ecuaciones diferenciales ordinarias. (Spanish) [Problems in ordinary differential equations] **58** #17257

Hagin, Frank G. ★A first course in differential equations. **50** #13673

Halanay, Aristide ★Ecuaţii diferenţiale. (Romanian) [Differential equations] **50** #7619

Heading, John ★Ordinary differential equations—theory and practice. **58** #28734

Hochstadt, Harry ★Differential equations. **52** #836

(Jankovskiĭ, G.) *See* **Èl'sgol'c, L. È., 49** #9291

Jordan, Dominic William (*with* Smith, Peter) ★Nonlinear ordinary differential equations. **57** #16750

Kappel, Franz *See* **Knobloch, H. W., 58** #28735

(Kečkić, Jovan D.) *See* **Mitrinović, Dragoslav S., 56** #8937

Knobloch, H. W. (*with* Kappel, Franz) ★Gewöhnliche Differentialgleichungen. **58** #28735

Konstantinov, Mihail M. *See* **Baĭnov, Drumi D., 48** #8904

Križanič, France ★Navadne diferencialne enačbe in variacijski račun. (Slovenian) [Ordinary differential equations and the calculus of variations] **50** #7620

Kuntzmann, Jean ★Systeme von Differentialgleichungen. **50** #2583

Lefschetz, Solomon ★Differential equations: geometric theory. **55** #8441

Matveev, N. M. ★Сборник задач и упражнений по обыкновенным дифференциальным уравнениям. (Russian) [A collection of problems and exercises in ordinary differential equations.] **47** #5331

  ★Методы интегрирования обыкновенных дифференциалных уравений. (Russian) [Methods of integrating ordinary differential equations] **53** #13683

  ★Дифференциальные уравнения. (Russian) [Differential equations] **56** #12358

  ★Сборник задач и упражнений по обыкновенным дифференциальным уравнениям. (Russian) [A collection of problems and exercises in ordinary differential equations] **55** #12978

Menzala, Gustavo Perla ★Equações diferenciais: ordinárias e parciais. (Portuguese) [Differential equations: ordinary and partial] **58** #6406

Mitrinović, Dragoslav S. (*with* Vasić, Petar M.) ★Diferencijalne jednačine. (Serbo-Croatian) [Differential equations] **50** #7621

  ★Predavanja o diferencijalnim jednačinama. (Serbo-Croatian) [Lectures on differential equations] **56** #8937

Morozova, V. M. The theorem on the existence and uniqueness of the solution of systems of ordinary differential equations in a course of lectures on higher mathematics at a technical university. (Russian) **56** #16024

  The singular points of first order ordinary differential equations in a course on higher mathematics at a technical university. (Russian) **56** #16025

Myint-U, Tyn ★Ordinary differential equations. **57** #12946

(Palmieri, G.) *See* **Temi di esame di analisi matematica, 50** #5063

Peral, Ireneo *See* **de Guzmán, Miguel; et al., 58** #17257

(Petrossov, G.) *See* **Filippov, A. F., 55** #5935

Ponomarev, K. K. ★Составление дифференциальных уравнений. (Russian) [Setting up of differential equations] **57** #12947

Rabenstein, Albert L. ★Introduction to ordinary differential equations. **49** #10942

Rainville, Earl D. ★Intermediate differential equations. **52** #14420

  (*with* Bedient, Phillip E.) ★A short course in differential equations. **49** #9292

  (*with* Bedient, Phillip E.) ★Elementary differential equations. **49** #9293

Rašajski, Borivoje ★Teorija običnih diferencijalnih jednačina. (Serbo-Croatian) [The theory of ordinary differential equations] **50** #7622

(Rodriquez, Gaetano) *See* **Temi di esame di analisi matematica, 50** #5063

Ross, Shepley L. ★Introduction to ordinary differential equations. **50** #10386

  ★Differential equations. **50** #10387

Roxin, Emilio O. ★Ordinary differential equations. **57** #3482

Rubinstein, Zalman ★A course in ordinary and partial differential equations. (See Zbl 175, 378)

Šaranovič, Stevan Integrability criteria for a third order linear differential equation. (Serbian. French summary) **58** #6407

Schäfke, F. W. (*with* Schmidt, Dieter S.) ★Gewöhnliche Differentialgleichungen. **50** #7623

Schmidt, Dieter S. *See* **Schäfke, F. W., 50** #7623

(Silverman, Richard A.) *See* **Arnol'd, V. I., 58** #22707

Simmons, George F. ★Differential equations with applications and historical notes. **58** #17258

Smith, Peter *See* **Jordan, Dominic William, 57** #16750

(Tarsi, A.) *See* **Temi di esame di analisi matematica, 50** #5063

Tihonov, A. N. (*with* Vasil'eva, A. B.; Volosov, V. M.) Ordinary differential equations. **54** #628

(Vaghi, Carla) *See* **Temi di esame di analisi matematica, 50** #5063

Vasić, Petar M. *See* **Mitrinović, Dragoslav S., 50** #7621

Vasil'eva, A. B. *See* **Tihonov, A. N.; et al., 54** #628

Volosov, V. M. *See* **Tihonov, A. N.; et al., 54** #628

Walias Cuadrado, Magdalena *See* **de Guzmán, Miguel; et al., 58** #17257

Walter, Wolfgang ★Gewöhnliche Differentialgleichungen. **53** #8528

  ★Gewöhnliche Differentialgleichungen. **53** #8529

Weizel, Rainer (*with* Weyland, Jutta) ★Gewöhnliche Differentialgleichungen. **50** #10388

Weyland, Jutta *See* **Weizel, Rainer, 50** #10388

Problems:

  Mathematical analysis *See* **Temi di esame di analisi matematica, 50** #5063

Temi di esame di analisi matematica ★Temi di esame di analisi matematica 2, Politecnico di Milano-Facoltà di Ingegneria. **50** #5063

Secondary classifications:

Aulin, Allan (*with* Fröberg, Carl-Erik) Evaluation of an elementary integral. (**51** #820)

Bentley, Donald L. (*with* Cooke, Kenneth L.) ★Linear algebra with differential equations. (**50** #7183)

(Buttin, Claudette) *See* **Cartan, H.,** (**49** #8772) *and* **Cartan, H.,** (**49** #8773)

Cartan, H. ★Differential calculus. (**49** #8772)

  ★Differentialrechnung. (**49** #8773)

Cooke, Kenneth L. *See* **Bentley, Donald L.,** (**50** #7183)

Driver, R. D. ★Ordinary and delay differential equations. (**57** #16897)

Fischer, Wolfgang *See* **Grauert, Hans; et al.,** (**51** #819) *and* **Grauert, Hans,** (**53** #8337)

Forster, Otto ★Analysis 2. Differentialrechnung im $\mathbf{R}^n$. (**58** #11255)

Fröberg, Carl-Erik *See* **Aulin, Allan,** (**51** #820)

(Garavito, J.) *See* **Note on some entire transcendental functions,** (**53** #8394)

Grauert, Hans (*with* Lieb, Ingo; Fischer, Wolfgang) ★Дифференциальное и интегральное исчисление. (Russian) [Differential and integral calculus] (**51** #819)

  (*with* Fischer, Wolfgang) ★Differential- und Integralrechnung. II. (**53** #8337)

Gröbner, Wolfgang ★Differentialgleichungen. II. (**58** #22951)

Hille, Einar ★Methods in classical and functional analysis. (**57** #3802)

Krall, Allan M. ★Linear methods of applied analysis. (**56** #5099)

Lara-Carrero, Lorenzo ★Ecuaciones en derivadas parciales lineales. (Spanish) [Linear partial differential equations] (**58** #11821)

Lieb, Ingo *See* **Grauert, Hans; et al.,** (**51** #819)

(Rideau, F.) *See* **Cartan, H.,** (**49** #8772) *and* **Cartan, H.,** (**49** #8773)

(Schwarz, Wolfgang) *See* **Cartan, H.,** (**49** #8773)

(Vaĭnšteĭn, I. A.) *See* **Grauert, Hans; et al.,** (**51** #819)

(Verley, J. L.) *See* **Cartan, H.,** (**49** #8772) *and* **Cartan, H.,** (**49** #8773)

Note on some entire transcendental functions Note: "On some entire transcendental functions" (Spanish) (Anales de Ingeniería **24** (1916), 150–157) by J. Garavito. (**53** #8394)

34–02 Advanced exposition (research surveys, etc.)

Arnol'd, V. I. ★Лекции по теории обыкновенных дифференциальных уравнений. Часть 1. (Russian) [Lectures on the theory of ordinary differential equations. Part 1] **50** #13674

  ★Лекции по теории обыкновенных дифференциальных уравнений. Часть 2. (Russian) [Lectures on the theory of ordinary differential equations. Part 2] **50** #13675

  ★Лекции по обыкновенным дифференциальным уравнениям. Часть 3. (Russian) [Lectures on ordinary differential equations. Part 3] **50** #13676

  ★Обыкновенные дифференциальные уравнения. (Russian) [Ordinary differential equations] **50** #13677

  ★Équations différentielles ordinaires. **50** #13678

  ★Обыкновенные дифференциальные уравнения. (Russian) [Ordinary differential equations] **52** #3637

  ★Równania różniczkowe zwyczajne. (Polish) [Ordinary differential equations] **55** #10755

(Arscott, F. M.) *See* **Borůvka, Otakar, 57** #3484

Borůvka, Otakar ★Linear differential transformations of the second order. **57** #3484

(Bravo Gala, Luis) *See* **Pontrjagin, L. S., 52** #14423

(Colombo, Serge) *See* **Yosida, Kôsaku, 49** #9296

Conti, R. *See* **Reĭssig, R.; et al., 49** #9295

Coppel, W. A. Ordinary differential equations. **58** #1316

(Derkowska, Alicja) *See* **Arnol'd, V. I., 55** #10755

(Derkowski, Gabriel) *See* **Arnol'd, V. I., 55** #10755

Duff, Georges F. D. Differential equations today. (See RŽMat **1965** #12 B277)

(Embarek, Djilali) *See* **Arnol'd, V. I., 50** #13678

de Guzmán, Miguel ★Ecuaciones diferenciales ordinarias. (Spanish) [Ordinary differential equations] **57** #12948

Hale, Jack K. ★Ordinary differential equations. **54** #7918

Hartman, Philip ★Ordinary differential equations. **49** #9294

Hermes, Henry A survey of recent results in differential equations. **52** #14421

Hille, Einar Non-linear differential equations; questions and some answers. **57** #16751

Hukuhara, Masuo (*with* Iwano, Masahiro; Okubo, Kenjiro; Kimura, Tosihusa) Analytic theory of ordinary differential equations. **58** #6408

Ionescu, Dumitru V. ★Ecuaţii diferenţiale şi integrale. (Romanian) [Differential and integral equations] **50** #13680

Iwano, Masahiro *See* **Hukuhara, Masuo; et al., 58** #6408

Kartašev, A. P. (*with* Roždestvenskiĭ, B. L.) ★Обыкновенные дифференциальные уравнения и основы вариационного исчисления. (Russian) [Ordinary differential equations and the foundations of the calculus of variations] **53** #915

Kimura, Tosihusa *See* **Hukuhara, Masuo; et al., 58** #6408

Lakshmikantham, V. (*with* Leela, S.) ★Differential and integral inequalities: Theory and applications. Vol. I: Ordinary differential equations. **52** #837

(*with* Leela, S.) ★Differential and integral inequalities: Theory and applications. Vol. II: Functional, partial, abstract, and complex differential equations. **52** #838

Leela, S. *See* **Lakshmikantham, V.**, **52** #837 *and* **Lakshmikantham, V.**, **52** #838

Lika, Dionis (*with* Rjabov, Ju. A.) ★Методы итераций и мажорирующие уравнения Ляпунова в теории нелинейных колебаний. (Russian) [Iteration methods and majorizing Ljapunov equations in the theory of nonlinear oscillations] **58** #28736

Manolov, Spas ★Автономни системи диференциални уравнения. (Bulgarian) [Autonomous systems of differential equations] **58** #28737

Marčenko, V. O. ★Операторы Штурма-Лиувилля и их приложения. (Russian) [Sturm-Liouville operators and their applications] **58** #1317

Mawhin, Jean L. Un aperçu des recherches belges en théorie des équations différentielles ordinaires dans le champ réel entre 1967 et 1972. **52** #14422

See also **Rouche, Nicolas**, **58** #1318a *and* **Rouche, Nicolas**, **58** #1318b

Moses, Joel Toward a general theory of special functions. **53** #3384

Myškis, A. D. Some problems in the theory of differential equations with deviating argument. (Russian) **58** #11561

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34D99 None of the above, but in this section

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Jxx Functional differential equations

4J05 General theory

Secondary classifications:

ov, Drumi D. *See* **Miluševa, S. D.**, (See Zbl **357** #34042)

ševa, S. D. (*with* Baĭnov, Drumi D.) Justification of the averaging method for a class of integro-differential equations of generalized Volterra type. (Bulgarian. Russian and English summaries) (See Zbl **357** #34042)

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ita, Kazuaki A note on nonlinear differential-difference equations. (**52** #16069)

34J99 None of the above, but in this section

Kxx Functional-differential equations with retarded arguments, functional-differential equations with deviating arguments

sti, John) *See* **Èl'sgol'c, L. È.; et al.**, **50** #5134

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sgol'c, L. È. (*with* Norkin, S. B.) ★Введение в теорию дифференциальных уравнений с отклоняющимся аргументом. (Russian) [Introduction to the theory of differential equations with deviating argument] **50** #5133

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le, Jack K. ★Functional differential equations of retarded type. **57** #6710

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★Theory of functional differential equations. **58** #22904

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(*with* Myškis, A. D.; Šarkovs'kiĭ, O. M.) The Fourth All-Union Conference on the Theory and Applications of Differential Equations with Deviating Argument. (Russian) **54** #675

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omanenko, O. Ju. *See* **Mītropol's'kiĭ, Ju. O.; et al.**, **53** #8602

ubanik, V. P.) *See* **Abstracts: All-Union Inter-university Conference on the Theory and Applications of Differential Equations with Deviating Argument**, **50** #13794

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All-Union Conference:

Theory and Applications of Differential Equations with Deviating Argument *See* **Mītropol's'kiĭ, Ju. O.; et al.**, **53** #8602

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Chang, Mou Hsiung (*with* Ladde, Gangaram S.; Liu, Pan Tai) Stability of stochastic functional differential equations. (**50** #11443)

Glazunova, L. V. The character of the arrangement of integral curves of some systems of ordinary integro-differential equations. (Russian) (**58** #29944)

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Mītropol's'kiĭ, Ju. O. (*with* Šarkovs'kiĭ, O. M.) Development of the theory of differential equations with deviating argument at the Institute of Mathematics of the Academy of Sciences of the Ukrainian SSR. (Russian) (**58** #4921)

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(*with* Schäffer, Juan Jorge) The structure of translation-invariant mem **55** #10799 (E **55** #10800)

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★Лекции по нелинейным краевым задачам математической физики. (Russian) [Lectures on the nonlinear boundary value problems of mathematical physics] **58** #22950

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Bobik, O. Ī. (*with* Bodnarčuk, P. Ī.; Ptašnik, B. Ī.; Skorobogat′ko, V. Ja.) ★Елементи якісної теорії дифференціальних рівнянь з частинними похідними. (Ukrainian) [Elements of the qualitative theory of partial differential equations] **56** #12516

Bodnarčuk, P. Ī. *See* **Bobik, O. Ī.; et al.**, **56** #12516

Budak, B. M. (*with* Samarskiĭ, A. A.; Tihonov, A. N.) ★Сборник задач по математической физике. (Russian) [A collection of problems in mathematical physics] **49** #9376

Colombo, Serge ★Les équations aux dérivées partielles en physique et en mécanique des milieux continus. **57** #832

De Cicco, John (*with* Anderson, Robert V.) Elements of density transformations of a Euclidean space E_n. **48** #2532

Dou, Alberto M. ★Lectures on partial differential equations of first order. **58** #29030

(*with* Mendizabal, Alfredo) ★Ecuaciones en derivadas parciales y su resolucion numerica. (Spanish) [Partial differential equations and their numerical solution] **55** #5987

Epstein, Bernard ★Partial differential equations: an introduction. **57** #833

Erwe, Friedhelm (*with* Peschl, Ernst) ★Partielle Differentialgleichungen erster Ordnung. **50** #13831

Folland, Gerald B. ★Introduction to partial differential equations. **58** #29031

Friedman, Avner ★Partial differential equations. **56** #3433

(Gerlach, Eberhard) *See* **Hellwig, Günter**, **57** #6757

Godunov, S. K. ★Уравнения математической физики. Вып. 1. (Russian) [Equations of mathematical physics. No. 1] **50** #7751

★Уравнения математической физики. Вып. 2. (Russian) [Equations of mathematical physics. No. 2] **50** #7752

★Уравнения математической физики. (Russian) [Equations of mathematical physics] **50** #7753

★Équations de la physique mathématique. **50** #7755

(*with* Zolotareva, E. V.) ★Сборник задач по уравнениям математической физики. (Russian) [A collection of problems on the equations of mathematical physics] **50** #7754

★Równania fizyki matematycznej. (Polish) [Equations of mathematical physics] **58** #1494

Gröbner, Wolfgang ★Differentialgleichungen. II. **58** #22951

Hellwig, Günter ★Partial differential equations. **57** #6757

John, Fritz ★Partial differential equations. **46** #3960

Karimova, H. H. *See* **Vladimirov, V. S.; et al.**, **55** #5988

Kečkić, Jovan D. Notes on partial differential equations. III. Two Dirichlet type problems for Poisson's equation. **57** #3567

See also **Mitrinović, Dragoslav S.**, **50** #7757

Kondraševa, I. L. ★Уравнения математической физики. (Russian) [Equations of mathematical physics] **54** #3131

(Kovalevskaja, S. V.) *See* **Oleĭnik, O. A.**, **58** #1495

(Kuczma, Marcin E.) *See* **Szmydt, Zofia**, **58** #22952b

Ladyženskaja, O. A. ★Краевые задачи математической физики. (Russian) [Boundary value problems of mathematical physics] **58** #29032

Lara-Carrero, Lorenzo ★Ecuaciones en derivadas parciales lineales. (Spanish) [Linear partial differential equations] **58** #11821

Leis, Rolf ★Vorlesungen über partielle Differentialgleichungen zweiter Ordnung. (See Zbl **159**, 382)

Lieberstein, H. Melvin ★Theory of partial differential equations. **50** #7756

(Mayorga, Bernardo) *See* **Smirnov, M. M.**, **54** #3132

Mendizabal, Alfredo *See* **Dou, Alberto M.**, **55** #5987

Mihaĭlov, V. P. *See* **Vladimirov, V. S.; et al.**, **55** #5988

Mitrinović, Dragoslav S. (*with* Kečkić, Jovan D.) ★Jednačine matematičke fizike. (Serbo-Croatian) [Equations of mathematical physics] **50** #7757

(Miyahara, Katsumi) *See* **Mizohata, Sigeru, 58** #29033

Mizohata, Sigeru ★The theory of partial differential equations. **58** #29033

(Muszyński, Jerzy) *See* **Godunov, S. K., 58** #1494

Myint-U, Tyn ★Partial differential equations of mathematical physics. **50** #7758

(Néel, L.) *See* **Colombo, Serge, 57** #832

Oleĭnik, O. A. S. V. Kovalevskaja's theorem and its role in the modern theory of partial differential equations (on the occasion of the 125th anniversary of the birth of S. V. Kovalevskaja). (Russian) **58** #1495

Peschl, Ernst *See* **Erwe, Friedhelm, 50** #13831

(Pétrova, Irina) *See* **Vladimirov, V. S.; et al., 55** #5988

Powers, David L. ★Boundary value problems. **57** #6758

Ptašnik, B. Ĭ. *See* **Bobik, O. Ī.; et al., 56** #12516

Šabunin, M. I. *See* **Vladimirov, V. S.; et al., 55** #5988

Samarskiĭ, A. A. *See* **Budak, B. M.; et al., 49** #9376 *and* **Tihonov, A. N., 49** #9377

Schechter, Martin ★Modern methods in partial differential equations. **58** #17436

Showalter, Ralph E. ★Hilbert space methods for partial differential equations. **57** #16922

Sidorov, Ju. V. *See* **Vladimirov, V. S.; et al., 55** #5988

Skorobogat′ko, V. Ja. *See* **Bobik, O. Ī.; et al., 56** #12516

Smirnov, M. M. ★Дифференциальные уравнения в частных производных второго порядка. (Russian) [Second order partial differential equations] **52** #11275

★Задачи по уравнениям математической физики. (Russian) [Problems on the equations of mathematical physics] **54** #3133

★Problemas de ecuaciones de la física matemática. (Spanish) [Problems on the equations of mathematical physics] **54** #3132

Swan, George W. Solution of linear one-dimensional diffusion equations. **53** #6061

Szmydt, Zofia ★Transformacja Fouriera i równania różniczkowe liniowe. (Polish) [Fourier transforms and linear differential equations] **58** #22952a

★Fourier transformation and linear differential equations. **58** #22952b

Tamme, È. È. (*with* Vaĭnikko, G.) ★Matemaatilise füüsika võrrandid. I. (Estonian) [Equations of mathematical physics. I] **58** #1496a

(*with* Vaĭnikko, G.) ★Matemaatilise füüsika võrrandid. II. (Estonian) [Equations of mathematical physics. II] **58** #1496b

Thoe, Dale W. *See* **Zachmanoglou, E. C., 57** #3568

Tihonov, A. N. (*with* Samarskiĭ, A. A.) ★Уравнения математической физики. (Russian) [The equations of mathematical physics] **49** #9377

See also **Budak, B. M.; et al., 49** #9376

Vaĭnikko, G. *See* **Tamme, È. È., 58** #1496a *and* **Tamme, È. È., 58** #1496b

Vašarin, A. A. *See* **Vladimirov, V. S.; et al., 55** #5988

Vladimirov, V. S. (*with* Mihaĭlov, V. P.; Šabunin, M. I.; Karimova, H. H.; Sidorov, Ju. V.; Vašarin, A. A.) ★Recueil de problèmes d'équations de physique mathématique. **55** #5988

Young, Eutiquio C. ★Partial differential equations. **50** #13832

Zachmanoglou, E. C. (*with* Thoe, Dale W.) ★Introduction to partial differential equations with applications. **57** #3568

Zolotareva, E. V. *See* **Godunov, S. K., 50** #7754

Anniversary:

Birth of S. V. Kovalevskaja *See* **Oleĭnik, O. A., 58** #1495

Secondary classifications:

Amundson, Neal R. *See* **Aris, Rutherford,** (**51** #7405)

Aris, Rutherford (*with* Amundson, Neal R.) ★Mathematical methods in chemical engineering. (**51** #7405)

Bicadze, A. V. (*with* Kaliničenko, D. F.) ★Сборник задач по уравнениям математической физики. (Russian) [Collection of problems on the equations of mathematical physics] (**58** #3804)

Friberg, Jöran ★Tillämpad linjär analys. (Swedish) [Applied linear analysis] (**51** #2381)

Gjunter, N. M. (*with* Kuz′min, R. O.) ★Aufgabensammlung zur höheren Mathematik. Band II. (**58** #26628)

Hudjaev, S. I. *See* **Vol′pert, A. I.,** (**55** #903)

Ionescu, Dumitru V. ★Ecuaţii diferenţiale şi integrale. (Romanian) [Differential and integral equations] (**50** #13680)

Kaliničenko, D. F. *See* **Bicadze, A. V.,** (**58** #3804)

Krall, Allan M. ★Linear methods of applied analysis. (**56** #5099)

Kuz′min, R. O. *See* **Gjunter, N. M.,** (**58** #26628)

Menzala, Gustavo Perla ★Equações diferenciais: ordinárias e parciais. (Portuguese) [Differential equations: ordinary and partial] (**58** #6406)

Mihaĭlov, V. P. ★Дифференциальные уравнения в частных производных. (Russian) [Partial differential equations] (**58** #1497)

Rubinstein, Zalman ★A course in ordinary and partial differential equations. (See Zbl 175, 378)

Vol′pert, A. I. (*with* Hudjaev, S. I.) ★Анализ в классах разрывных функций и уравнения математической физики. (Russian) [Analysis in classes of discontinuous functions, and the equations of mathematical physics] (**55** #903)

Walter, Wolfgang ★Einführung in die Potentialtheorie. (**50** #13563)

35–02 Advanced exposition (research surveys, etc.)

Ames, William F. ★Nonlinear partial differential equations in engineering. Vol. II. **57** #13108

(Babič, V. M.) *See* **Mihlin, S. G., 50** #733

(Bakel′man, I. Ja.) *See* **Mihlin, S. G., 50** #733

(Berg, Christa) *See* **Smirnov, V. I., 50** #5147

(Berg, Lothar) *See* **Smirnov, V. I., 50** #5147

(Bicadze, A. V.) *See* **Partial differential equations, 46** #9500

Carrier, George F. (*with* Pearson, Carl E.) ★Partial differential equations. **53** #8623

Carroll, Robert Wayne (*with* Showalter, Ralph E.) ★Singular and degenerat problems. **57** #834

Copson, E. T. ★Partial differential equations. **52** #14555

(Egorov, Ju. V.) *See* **Nirenberg, L., 56** #9049

(Fife, P. C.) *See* **Oleĭnik, O. A.; et al., 56** #16112

Friedman, Avner ★Partial differential equations. **56** #12517

Gilbarg, David (*with* Trudinger, Neil S.) ★Elliptic partial differential equa second order. **57** #13109

John, Fritz ★Partial differential equations. **50** #2655

Karimova, H. H. *See* **Vladimirov, V. S.; et al., 52** #14556

Kinderlehrer, David Variational inequalities and free boundary problems. **57** #

(Kuhnert, Frieder) *See* **Mihlin, S. G., 50** #733

(Ladyženskaja, O. A.) *See* **Boundary value problems of mathematical physics an aspects of function theory, 46** #9497; **Boundary value problems of mathemati physics and related aspects of function theory, 46** #9498 *and* **Boundary value problems of mathematical physics and related aspects of function theory, 46** #

(Maz′ja, V. G.) *See* **Mihlin, S. G., 50** #733

Mihaĭlov, V. P. ★Дифференциальные уравнения в частных производных. ([Partial differential equations] **58** #1497

See also **Vladimirov, V. S.; et al., 52** #14556

Mihlin, S. G. ★Lehrgang der mathematischen Physik. **50** #733

Nirenberg, L. ★Lectures on linear partial differential equations. **56** #9048

Lectures on linear partial differential equations. (Russian) **56** #9049

Oleĭnik, O. A. (*with* Radkevič, E. V.) Second order equations with nonnegative characteristic form. (Russian) **56** #16111

(*with* Radkevič, E. V.) ★Second order equations with nonnegative chara form. **56** #16112

Pearson, Carl E. *See* **Carrier, George F., 53** #8623

(Prößdorf, Siegfried) *See* **Mihlin, S. G., 50** #733

Prouse, Giovanni ★Equazioni differenziali alle derivate parziali. **50** #5146

Radkevič, E. V. *See* **Oleĭnik, O. A., 56** #16111 *and* **Oleĭnik, O. A., 56** #16112

Šabunin, M. I. *See* **Vladimirov, V. S.; et al., 52** #14556

Sattinger, David H. ★Topics in stability and bifurcation theory. **57** #3569

Schulze, Bert-Wolfgang (*with* Wildenhain, Günther) ★Methoden der Potential für elliptische Differentialgleichungen beliebiger Ordnung. **58** #17437

Serrin, J. The solvability of boundary value problems. **55** #814

Showalter, Ralph E. *See* **Carroll, Robert Wayne, 57** #834

Sidorov, Ju. V. *See* **Vladimirov, V. S.; et al., 52** #14556

(Silbermann, Bernd) *See* **Mihlin, S. G., 50** #733

Smirnov, V. I. ★Lehrgang der höheren Mathematik. Teil IV. **50** #5147

(Sobolev, S. L.) *See* **Partial differential equations, 46** #9500

Tautz, Heinz ★Wärmeleitung und Temperaturausgleich. **53** #8624

Treves, F. ★Basic linear partial differential equations. **56** #6063

Trudinger, Neil S. *See* **Gilbarg, David, 57** #13109

Vašarin, A. A. *See* **Vladimirov, V. S.; et al., 52** #14556

Vladimirov, V. S. ★Уравнения математической физики. (Russian) [Equations of mathematical physics] **50** #5148

(*with* Mihaĭlov, V. P.; Vašarin, A. A.; Karimova, H. H.; Sidorov, Ju. V.; Šabunin, M. I.) ★Сборник задач по уравнениям математической физики. (Russian) [Collection of problems on the equations of mathematical physics] **52** #14556

★Уравнения математической физики. (Russian) [The equations of mathematical physics] **53** #13791

Wildenhain, Günther *See* **Schulze, Bert-Wolfgang, 58** #17437

Birthday:

Sobolev, S. L. *See* **Partial differential equations, 46** #9500

Boundary value problems of mathematical physics and related aspects of function

★Boundary value problems of mathematical physics and related aspects of fu theory, Part II. **46** #9497

★Boundary value problems of mathematical physics and related aspe function theory, Part III. **46** #9498

★Boundary value problems of mathematical physics and related aspe function theory, Part IV. **46** #9499

Partial differential equations ★Дифференциальные уравнения с частными производными. (Russian) [Partial differential equations] **46** #9500

Problems:

Mathematical physics *See* **Vladimirov, V. S.; et al., 52** #14556

Seminars in Mathematics (V. A. Steklov Math. Inst., Leningrad) *See* **Boundary problems of mathematical physics and related aspects of function theory, 46** # **Boundary value problems of mathematical physics and related aspects of fu theory, 46** #9498 *and* **Boundary value problems of mathematical physics and aspects of function theory, 46** #9499

Symposium:

S. L. Sobolev *See* **Partial differential equations, 46** #9500

Secondary classifications:

Berezovs′kiĭ, A. A. ★Лекции по нелинейным краевым задачам математической физики. (Russian) [Lectures on the nonlinear boundary value problems of mathematical physics] (**58** #22949)

★Лекции по нелинейным краевым задачам математической физики. (Russian) [Lectures on the nonlinear boundary value problems of mathen physics] (**58** #22950)

★Лекции по нелинейным краевым задачам математической физики. (Russian) [Lectures on the nonlinear boundary value problems of mathen physics] (**57** #14671a)

★Лекции по нелинейным краевым задачам математической физики. (Russian) [Lectures on the nonlinear boundary value problems of mathen physics] (**57** #14671b)

Bicadze, A. V. The present-day state of the theory of equations of mixed type. (R (**57** #10263)

Birman, M. Š. (*with* Solomjak, M. Z.) Asymptotic properties of the spectrum of differential equations. (Russian) (**57** #6892)

Cesari, Lamberto Functional analysis, nonlinear differential equations, and the alternative method. (**58** #7249)

Colton, David L. ★Partial differential equations in the complex domain. (**58** #1543)

★Solution of boundary value problems by the method of integral operators. (**58** #1544)

Dieudonné, Jean A. ★Éléments d'analyse. Tome VII. Chapitre XXIII. Première partie. (**58** #13103a)

★Éléments d'analyse. Tome VIII. Chapitre XXIII. Deuxième partie. (**58** #13103b)

Doetsch, Gustav ★Handbuch der Laplace-Transformation. Band III: Anwendungen der Laplace-Transformation. 2. Abteilung. (**50** #5379)

Friedman, Avner ★Partial differential equations. (**56** #3433)

Gajewski, Herbert (*with* Gröger, Konrad; Zacharias, K.) ★Nichtlineare Operatorgleichungen und Operatordifferentialgleichungen. (**58** #30524a)

(*with* Gröger, Konrad; Zacharias, K.) ★Нелинейные операторные уравнения и операторные дифференциальные уравнения. (Russian) [Nonlinear operator equations and operator differential equations] (**58** #30524b)

Gröger, Konrad *See* **Gajewski, Herbert; et al.**, (**58** #30524a) *and* **Gajewski, Herbert; et al.**, (**58** #30524b)

Ladyženskaja, O. A. (*with* Ural′ceva, N. N.) ★Линейные и квазилинейные уравнения эллиптического типа. (Russian) [Linear and quasilinear equations of elliptic type] (**58** #23009)

Miranda, Carlo ★Problemi di esistenza in analisi funzionale. (**52** #15123)

Mitropol′s′kiĭ, Ju. O. (*with* Moseenkov, B. I.) ★Асимптотические решения уравнений в частных производных. (Russian) [Asymptotic solutions of partial differential equations] (**58** #29114)

(Miyahara, Katsumi) *See* **Mizohata, Sigeru**, (**58** #29033)

Mizohata, Sigeru ★The theory of partial differential equations. (**58** #29033)

Moseenkov, B. I. *See* **Mitropol′s′kiĭ, Ju. O.**, (**58** #29114)

Pazy, Amnon ★Semi-groups of linear operators and applications to partial differential equations. (**58** #23754)

(Perov, A. I.) *See* **Gajewski, Herbert; et al.**, (**58** #30524b)

(Sobolev, V. I.) *See* **Gajewski, Herbert; et al.**, (**58** #30524b)

Solomjak, M. Z. *See* **Birman, M. Š.**, (**57** #6892)

Triebel, Hans ★Höhere Analysis. (**50** #12511)

Ural′ceva, N. N. *See* **Ladyženskaja, O. A.**, (**58** #23009)

Zacharias, K. *See* **Gajewski, Herbert; et al.**, (**58** #30524a) *and* **Gajewski, Herbert; et al.**, (**58** #30524b)

(Zadorožniĭ, V. G.) *See* **Gajewski, Herbert; et al.**, (**58** #30524b)

35–03 Historical

Kočev, V. A. The development of methods for the integration of linear first order partial differential equations in the nineteenth century. (Russian) **49** #5527

Secondary classifications:

Aleksandrov, P. S. (*with* Bicadze, A. V.; Višik, M. I.; Oleĭnik, O. A.) Il′ja Nestorovič Vekua (on the occasion of his seventieth birthday). (Russian) (**56** #8299)

(d'Alembert, Jean Lerond) *See* **Demidov, S. S.**, (**58** #4860)

Babič, V. M. (*with* Birman, M. Š.; Smirnov, V. I.; Solomjak, M. Z.; Ural′ceva, N. N.) Ol′ga Aleksandrovna Ladyženskaja (on her fiftieth birthday). (Russian) (**45** #6560)

Bicadze, A. V. *See* **Aleksandrov, P. S.; et al.**, (**56** #8299) *and* **Erugin, N. P.; et al.**, (**53** #12840)

Birman, M. Š. *See* **Babič, V. M.; et al.**, (**45** #6560)

(Bogoljubov, O. M.) *See* **History of national mathematics in four volumes**, (**58** #26682)

Demidov, S. S. On the history of the theory of partial differential equations. (Russian) (**57** #15889)

Partial differential equations in the works of J. d'Alembert. (Russian) (**58** #4860)

The origin of the theory of partial differential equations. (Russian) (**58** #26951)

Erugin, N. P. (*with* Tihonov, A. N.; Il′in, V. A.) Andreĭ Vasil′evič Bicadze (on the occasion of his sixtieth birthday). (Russian) (**53** #12840)

Il′in, V. A. *See* **Erugin, N. P.; et al.**, (**53** #12840)

Janet, Maurice P. Zervos et le problème de Monge. (**45** #13)

(Juškevič, A. P.) *See* **History of national mathematics in four volumes**, (**58** #26682)

Kiro, S. M. An equation of M. V. Ostrogradskiĭ in the mathematical theory of heat conduction. (Russian. English summary) (**58** #27017)

Kosolapov, Ju. F. On the history of the theory of the wave equation in the second half of the nineteenth century. (Ukrainian. Russian summary) (**58** #21215)

(Kovalevskaja, S. V.) *See* **Correspondence: Karl Weierstrass and S. V. Kovalevskaja**, (**58** #21330)

(Ladyženskaja, O. A.) *See* **Babič, V. M.; et al.**, (**45** #6560)

Oleĭnik, O. A. The mathematical works of I. G. Petrovskiĭ. (Russian) (**52** #5286)

See also **Aleksandrov, P. S.; et al.**, (**56** #8299)

(Petrovskiĭ, I. G.) *See* **Oleĭnik, O. A.**, (**52** #5286)

(Polubarinova-Kočina, P. Ja.) *See* **Correspondence: Karl Weierstrass and S. V. Kovalevskaja**, (**58** #21330)

Serrin, J. The solvability of boundary value problems. (**55** #814)

Smirnov, V. I. *See* **Babič, V. M.; et al.**, (**45** #6560)

Sologub, V. S. ★Развитие теории эллиптических уравнений в XVIII и XIX столетиях. (Russian) [The development of the theory of elliptic equations in the eighteenth and nineteenth centuries] (**58** #27047)

Solomjak, M. Z. *See* **Babič, V. M.; et al.**, (**45** #6560)

(Štokalo, Ĭ. Z.) *See* **History of national mathematics in four volumes**, (**58** #26682)

Tihonov, A. N. *See* **Erugin, N. P.; et al.**, (**53** #12840)

Ural′ceva, N. N. *See* **Babič, V. M.; et al.**, (**45** #6560)

(Vekua, I. N.) *See* **Aleksandrov, P. S.; et al.**, (**56** #8299)

Višik, M. I. *See* **Aleksandrov, P. S.; et al.**, (**56** #8299)

(Weierstrass, Karl) *See* **Correspondence: Karl Weierstrass and S. V. Kovalevskaja**, (**58** #21330)

(Zervos, P.) *See* **Janet, Maurice**, (**45** #13)

Bibliography:

Bicadze, A. V. *See* **Erugin, N. P.; et al.**, (**53** #12840)

Petrovskiĭ, I. G. *See* **Oleĭnik, O. A.**, (**52** #5286)

Vekua, I. N. *See* **Aleksandrov, P. S.; et al.**, (**56** #8299)

Biography:

Bicadze, A. V. *See* **Erugin, N. P.; et al.**, (**53** #12840)

Ladyženskaja, O. A. *See* **Babič, V. M.; et al.**, (**45** #6560)

Petrovskiĭ, I. G. *See* **Oleĭnik, O. A.**, (**52** #5286)

Birthday:

Bicadze, A. V. *See* **Erugin, N. P.; et al.**, (**53** #12840)

Vekua, I. N. *See* **Aleksandrov, P. S.; et al.**, (**56** #8299)

Correspondence:

Karl Weierstrass and S. V. Kovalevskaja ★Письма Карла Вейерштрасса к Софье Ковалевской: 1871–1891. (German and Russian) [Letters from Karl Weierstrass to Sof′ja Kovalevskaja: 1871–1891] (**58** #21330)

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Mathematical physics *See* **Analytic methods in mathematical physics,** (48 #5746); **Difference methods for the solution of problems of mathematical physics,** (48 #12999); **Boundary value problems of mathematical physics and related aspects of function theory,** (49 #4700); **Methoden und Verfahren der mathematischen Physik,** (49 #10500); **Methoden und Verfahren der mathematischen Physik,** (49 #10501); **Methoden und Verfahren der mathematischen Physik,** (49 #10502); **Methoden und Verfahren der mathematischen Physik,** (49 #10503); **Methoden und Verfahren der mathematischen Physik,** (50 #6); **Methoden und Verfahren der mathematischen Physik,** (50 #7); **Methoden und Verfahren der mathematischen Physik,** (50 #8); **Methoden und Verfahren der mathematischen Physik,** (50 #9); **Theoretical and numerical methods of mathematical physics,** (52 #15160) *and* **Invariant wave equations,** (57 #9380)
Mathematical problems in geophysics ★Математические проблемы геофизики. Вып. 4. (Russian) [Mathematical problems in geophysics. No. 4] (57 #5543)
Mathematical problems in the theory of wave propagation ★Математические вопросы теории распространения волн. V. (Russian) [Mathematical problems in the theory of wave propagation. V] (48 #5772)
★Математические вопросы теории распространения волн. 6. (Russian) [Mathematical problems in the theory of wave propagation. 6] (48 #5773)
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★Methoden und Verfahren der mathematischen Physik, Band 5. (49 #10501)
★Methoden und Verfahren der mathematischen Physik, Band 6. (49 #10502)
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Proceedings:
  Equadiff ★Proceedings of Equadiff III. (49 #3253)
Pseudodifferential equations *See* **Hyperfunctions and pseudodifferential equations** (52 #8919)
Publications:
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Questions in differential equations ★Некоторые вопросы дифференциальных уравнений. (Russian) [Questions in differential equations] (48 #10742)
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  "Ettore Majorana" International, Mathematical Physics *See* **Invariant wave equations,** (57 #9380)
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  Goulaouic-Lions-Schwartz ★Séminaire Goulaouic-Lions-Schwartz 1974–197 Équations aux dérivées partielles linéaires et non linéaires. (52 #8965)
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Spectral theory of operators ★Спектральная теория операторов. (Russian) [S theory of operators] (57 #10446)
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Studies in applied mathematics ★Studies in applied mathematics. 5. (Not review
Studies in differential equations and their applications ★Исследования по дифференциальным уравнениям и их приложениям. (Russian) [Studies in differential equations and their applications] (55 #19)
Symposium:
  Analytic Methods in Mathematical Physics *See* **Analytic methods in mathem physics,** (48 #5746)
  Constructive and Computational Methods for Differential and Integral Equations Constructive and computational methods for differential and integral equ (50 #8907)
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  Numerische Lösung nichtlinearer partieller Differential- und Integrodifferentialgleichungen *See* **Numerische Lösung nichtlinearer partiell Differential- und Integrodifferentialgleichungen,** (49 #4199)
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35Axx General theory

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(Kurke, Herbert) *See* **Dieudonné, Jean A.,** (57 #14004d)
(Macdonald, I. G.) *See* **Dieudonné, Jean A.,** (50 #14508)
(Pfister, Gerhard) *See* **Dieudonné, Jean A.,** (57 #14004d)
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35A05 General existence and uniqueness theorems

Antypko, I. I. (*with* Perel′man, M. A.) Unique solution classes of a nonlocal multipoint boundary value problem in an infinite layer. (Russian) **49** #7565

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Concus, Paul (*with* Finn, Robert) A singular solution of the capillary equation. I. Existence. **51** #10824a

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Hudaverdiev, K. I. Analysis of the classical solution of a one-dimensional mixed problem for a certain class of functional equations. (Russian. Azerbaijani summary) **45** #693

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Miranda, Manuel Milla Analyse numérique d'un problème non linéaire d'évolution. (English summary) **55** #815

Miyake, Masatake A uniqueness theorem for initial-value problems. **48** #9054

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An elementary proof of the nonexistence of the solution of a certain partial differential equation. (Japanese) **58** #29041

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Orlov, Konstantin Some theorems concerning partial differential equations. **57** #10179

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Persson, Jan Non-uniqueness in the characteristic Cauchy problem when the coefficients are analytic. **48** #2534

Non-uniqueness and uniqueness in the Cauchy problem at simple characteristic points. **48** #4457

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Picone, Mauro Un apporto alla fenomenologia delle equazioni lineari a derivate parziali. (English summary) **46** #492

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Radochová, Věra Existence theorems for a partial differential equation of the fourth order. **55** #8522

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Rašajski, Borivoje Sur l'intégrale générale mixte pour les équations aux dérivées partielles du second ordre, application. **52** #965

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Šananin, N. A. The local solvability of equations of quasiprincipal type. (Russian) **57** #13112

An example of a locally unsolvable differential equation of quasiprincipal type with a real-valued weighted principal symbol. (Russian) **54** #13269

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Sigalov, I. E. The uniqueness of the solution of the Cauchy problem for quasiparabolic systems with variable coefficients. (Russian. English summary) **48** #11785

Sočneva, V. A. (*with* Fridlender, V. R.) Uniqueness spaces of Cauchy and Goursat problems. (Russian) **50** #7762

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Šugrin, S. M. Symmetric differential equations. II. (Russian) **45** #3905

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Winding numbers and the solvability condition (Ψ). **51** #6099

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Tupčiev, V. A. The uniqueness of the continuous solution of the problem of the decay of an arbitrary discontinuity for a gradient system. (Russian) **52** #3701

Unterberger, André Résolution d'équations aux dérivées partielles dans des espaces de distributions d'ordre de régularité variable. (English summary) **58** #29043

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Yamanaka, Takesi (*with* Persson, Jan) On an extension of Holmgren's uniqueness theorem. **48** #6623

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Bony, Jean-Michel (*with* Schapira, Pierre) Solutions hyperfonctions du problème de Cauchy. (**53** #1070)

Bronšteĭn, M. D. Spaces of Gevrey type. (Russian) (**50** #8046)

Cercignani, Carlo Sul più generale tensore doppio a divergenza nulla su una superficie comunque curva. (**49** #1328)

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Hanges, Nicholas Parametrices and local solvability for a class of singular hyperbolic operators. (**57** #13208)

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Hunt, L. R. (*with* Polking, John C.; Strauss, Monty J.) Unique continuation for solutions to the induced Cauchy-Riemann equations. (**58** #28663)

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Mironova, V. V. The existence and uniqueness of the solutions of certain systems of differential equations. (Russian) (**52** #11384)

Pallu de la Barrière, Philippe Existence et prolongement des solutions holomorphes des équations aux dérivées partielles. I. (**54** #3025)

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35A10 Cauchy-Kowalewski theorems

Baouendi, M. S. (*with* Goulaouic, C.) Problèmes de Cauchy relatifs à une surface initiale caractéristique--applications. **53** #13793

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Lascar, Bernard Théorème de Cauchy-Kovalewsky et théorème d'unicité d'Holmgren pour des fonctions d'une infinité de variables. (English summary) **53** #13794

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35A20 Analytic methods, singularities

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Pawelski, W. *See* **Kamont, Z.**, **49** #11012

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Rogers, Colin (*with* Kingston, John G.) Developments of A. Kahane's paper: "On some transformations of Bäcklund type relative to certain equations of the form $Z_{w\bar{w}} = f(Z)$". **47** #7188

Sarason, Leonard A canonical transformation near a boundary point. **52** #968

Scott, Alwyn C. *See* **Chu, Flora Ying Fun**, **51** #6100

Scriba, Carl-Heinz Koordinatenfreie Charakteristikentheorie. **50** #13840

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Sec, Antoinette Sur les équations de Pfaff polynomiales et pseudopolynomiales complètement intégrables. **50** #5154

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Tereščenko, M. Ī. Normal and normal-regular solutions of systems of partial differential equations. (Ukrainian. English and Russian summaries) **58** #29051

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★Toda lattices, cosymplectic manifolds, Bäcklund transformations and kinks. Part A. (**57** #17682)

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Iosif'jan, A. A. Characteristic problems with a principal part that contains mixed derivatives. (Russian) (**57** #10202)

Kakié, Kunio The extension of Darboux's method to systems in involution of partial differential equations of arbitrary order in two independent variables. (**53** #4112)

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Kalnins, E. G. (*with* Miller, Willard, Jr.) Lie theory and separation of variables. IX. Orthogonal *R*-separable coordinate systems for the wave equation $\psi_{tt} - D_2\psi = 0$. (**53** #8325a)

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Nariboli, G. A. *See* **Moulana, M.**, (**58** #12026)

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Rosen, Gerald (*with* Ullrich, George W.) Invariance group of the equation $\partial u/\partial t = -u\cdot\nabla u$. (48 #738)
Sadykov, I. H. The Lie transformation group that is admissible by a certain class of differential equations. (Russian) (54 #14021)
Šananin, N. A. An example of a locally unsolvable differential equation of quasiprincipal type with a real-valued weighted principal symbol. (Russian) (54 #13269)
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Tabov, Ĭ. B. The existence of resolvent distributions of dimension $n-r-1$ for not completely integrable Pfaffian system of rank r in R^n. (Russian) (53 #1622)
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Amiraliev, G. M. On the theory of the approximate solution of a boundary value problem for a certain class of third order differential equations. (Russian) 52 #969
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Beloborod'ko, V. T. Approximate solution of nonlinear boundary value problems for equations of elliptic type by the small parameter method. (Russian) 52 #970
Bensoussan, A. (*with* Lions, Jacques-Louis; Papanicolaou, George C.) Homogenization in deterministic and stochastic problems. 57 #13118
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Repnikova, N. M. Solution of a boundary value problem by means of appro (Russian) 58 #22961
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Rozenbljum, A. A. Asymptotic method for multi-dimensional systems of partial differential equations. 55 #819
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Vološina, M. S. Approximate solution of the Dirichlet problem for a class of sy differential equations by the Picone method. (Ukrainian. Russian summary) 58 #22962
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Colli Franzone, Piero Approssimazione mediante il metodo di penalizzazione di problemi misti di Dirichlet-Neumann per operatori lineari ellittici del secondo (English summary) (54 #5615)
Colton, David L. (*with* Gilbert, Robert Pertsch) New results on the approxima solutions to partial differential equations: the method of particular solutions. (52 #14578)
DeBlasi, Francesco S. (*with* Myjak, Józef Wenety) Generic properties of hy partial differential equations. (55 #10860)
Gilbert, Robert Pertsch *See* **Colton, David L.**, (52 #14578)
Hedberg, Lars Inge Approximation in the mean by solutions of elliptic equ (47 #633)
Hoff, David Approximation and decay of solutions of systems of nonlinear di equations. (58 #11837)
Hruslov, Ē. Ja. *See* **Marčenko, V. O.**, (58 #29166)
Kačur, Jozef (*with* Wawruch, Alojz) On an approximate solution for quasilinear parabolic equations. (58 #29278)
Kovač, Ju. Ī. Accelerated convergence to the solution of a linear partial diffe equation with retarded argument. (Russian. English summary) (58 #6766a)
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Marčenko, V. O. (*with* Hruslov, Ē. Ja.) Estimation of the accuracy of approximat solutions of boundary value problems with a fine-grained boundary. (Russian) (58 #29166)
Myjak, Józef Wenety *See* **DeBlasi, Francesco S.**, (55 #10860)
Naas, Josef (*with* Tutschke, W.) On the error in the approximate solution of bou value problems of nonlinear first order differential equations in the plane. (58 #13650)
Neuberger, J. W. Projection methods for linear and nonlinear systems of partial differential equations. (58 #29129)
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Saeks, Richard (*with* Strauss, Martin) A perturbation theorem for partial diffe operators. (58 #30383)
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Sigillito, Vincent G. A priori inequalities and the Direchlet problem for a pseudo-parabolic equation. (54 #5631)
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Strahov, V. N. The construction of order-optimal approximate solutions of linear conditionally well-posed problems. (Russian) (48 #9425)
Strauss, Martin *See* **Saeks, Richard**, (58 #30383)
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Avramenko, V. N. The application of the averaging method to the problem of propagation of a plane wave in a dissipative medium. (Russian) 50 #13841
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Gagua, M. B. Certain questions of the approximate solution of boundary value problems. (Russian) (**45** #1406)

Veidinger, L. On the order of convergence of a finite element scheme. (**50** #9012)

35A99 None of the above, but in this section

Akamatsu, Toyohiro On a parametrix in some weak sense of a first order linear partial differential operator with two independent variables. **56** #817

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Braičev, G. G. An example of a partial differential equation with constant coefficients that is not normally solvable in $[\rho, \sigma]$. (Russian) **53** #981

Broman, Arne On pathological properties of partial differential equations. **48** #688

Bulirsch, Roland Über eine linearisierung von $F(z_{xx}, z_{xy}, z_{yy}) = 0$. **50** #740

Chan, Sang Lung On the possible application of group representations to some boundary value and eigenvalue problems of certain domains without classical symmetry. I. Domains D_N of the first type. (German summary) **54** #13271

On the possible application of group representations to some boundary value and eigenvalue problems of certain domains without classical symmetry. II. Domains S_N of the second type and $S_{N+(1/2)}$ of the third type. (German summary) **54** #13272

Cinquini Cibrario, Maria Attualità di alcuni metodi classici in analisi matematica. (French summary) **58** #29057

De Giorgi, Ennio Sulle soluzioni globali di alcuni sistemi de equazioni differenziali. (English summary) **53** #3473

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Il'hamov, Z. Reducible partial differential equations with the operator L_ψ in rings of Study and Boole complexes. (Russian. Uzbek summary) **58** #29058

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Israilov, S. V. (*with* Tankiev, I. A.) Theorems on the existence of solutions of the singular Cauchy-Nicoletti problem for a countable system of ordinary differential equations. (Russian. Azerbaijani summary) **58** #1514

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Santi, Ettore Sul problema al contorno per l'equazione delle superfici di area minima su domini limitati qualunque. (English summary) **46** #495

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Botašev, A. I. *See* **Bykov, Ja. V.; et al.,** (**51** #1439)

Bykov, Ja. V. (*with* Botašev, A. I.; Merzljakova, G. D.) The symbolic method of solving boundary value and initial value problems for linear operator equations. (Russian) (**51** #1439)

Gronau, Detlef Eine Bemerkung zu einer partiellen Differentialgleichung von Hornich im Zusammenhang mit den schlichten Funktionen. (**56** #15906)

Grudo, È. I. An analogue of the equations of Fuchs type for second order total differential equations. (Russian) (**45** #2245)

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Ludwig, Klaus Grundlagen eines Kalküls der Richtungsableitungen auf Produkten kompakter metrischer Räume. (**57** #16933)

Lineare und nichtlineare Differentialgleichungen in Richtungsableitungen 1. Ordnung nach n stetigen, normierten Vektorfeldern $\mathfrak{a}_1(x, y), \cdots, \mathfrak{a}_n(x, y)$. (**57** #16934)

Mahmudov, A. P. (*with* Ragimov, M. B.) Analytic solutions of a certain system of functional equations. (Russian) (**58** #17634)

Malenica, Mirjana (*with* Halilović, Hatidža M.) A certain generalization of certain differential equations. (Serbo-Croatian. French summary) (**45** #2235)

Malikov, H. M. Linear partial differential equations of generalized Fuchs type. (Russian. English summary) (**58** #17197)

Malyšev, Ju. V. Systems with a finite number of singular points. (Russsian) (**45** #3840)

Merzljakova, G. D. *See* **Bykov, Ja. V.; et al.,** (**51** #1439)

Meyer, Gunter H. ★Initial value methods for boundary value problems. (**58** #8301)

Naas, Josef (*with* Tutschke, W.) Über neue Entwicklungstendenzen einer allgemeinen komplexen Analysis. (**52** #8487)

Obolašvili, E. I. A generalized Cauchy-Riemann system in a space of higher dimension. (Russian) (**58** #17138)

Ragimov, M. B. *See* **Mahmudov, A. P.,** (**58** #17634)

Schwarz, Gabriele Zur partiellen Differentialgleichung der schlichten Funktionen. (**56** #15908)

Simionescu, I. On the reduction of differential equations of Lagrange type to linear equations. (Romanian. French summary) (**47** #2117)

Treves, F. Concatenations of second-order evolution equations applied to local solvability and hypoellipticity. (**49** #5554)

Tutschke, W. *See* **Naas, Josef,** (**52** #8487)

Tužilin, A. A. A theory of functional equations of Maljužinec. IV. Nonhomogeneous functional equations with periodic coefficients. (Russian) (**45** #764)

Vigué, Jean-Pierre Opérateurs différentiels sur les espaces analytiques. (**48** #2413)

35Bxx Qualitative properties of solutions

Rauch, Jeffrey B. Five problems: an introduction to the qualitative theory of partial differential equations. **58** #22963

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Bobik, O. Ī. (*with* Bodnarčuk, P. Ī.; Ptašnik, B. Ĭ.; Skorobogat'ko, V. Ja.) ★Елементи якісної теорії дифференціальних рівнянь з частинними похідними. (Ukrainian) [Elements of the qualitative theory of partial differential equations] (**56** #12516)

Bodnarčuk, P. Ī. *See* **Bobik, O. Ī.; et al.,** (**56** #12516)

Heinz, Erhard Elementare Bemerkung zur isoperimetrischen Ungleichung im $\mathbf{R}^3$. (**48** #2328)

Ljapidevskiĭ, V. Ju. Propagation of nonlinear perturbations along a resting gas with variable density. (Russian) (**58** #32351)

Nakao, Mitsuhiro Bounded, periodic and almost periodic classical solutions of some nonlinear wave equations with a dissipative term. (**58** #11964)

Ptašnik, B. Ĭ. *See* **Bobik, O. Ī.; et al.,** (**56** #12516)

Skorobogat'ko, V. Ja. *See* **Bobik, O. Ī.; et al.,** (**56** #12516)

35B05 Comparison theorems; oscillation, zeros and growth of solutions

Abdurahmanova, H. Periodic solutions of a certain nonlinear equation of elliptic type that is degenerate on the boundary of the domain. (Russian) **51** #8594

Allegretto, Walter A comparison theorem for nonlinear operators. **45** #7233

Oscillation criteria for quasilinear equations. **49** #9381

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Oscillation criteria for semilinear equations in general domains. **55** #3487

Nonoscillation theory of elliptic equations of order $2n$. **54** #3135

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Nonoscillation criteria for elliptic equations in conical domains. **55** #13053

Anisimova, L. S. The integral surfaces of a class of equations. (Russian) **57** #3573

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Barański, Feliks The mean value theorem and oscillatory properties of certain elliptic equations in three dimensional space. **54** #13273

Bochenek, Jan Oscillation theorems and nodes of eigenfunctions of certain differential equations of the fourth order. **48** #9058

Bugīr, M. K. The disconjugacy of the solutions of systems of strongly elliptic differential equations. (Ukrainian. English and Russian summaries) **51** #3656

Bushard, Louis B. A comparison result for a class of quasilinear elliptic partial differential equations. **54** #10813

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A Sturm theorem for nonself-adjoint elliptic inequalities with mixed boundary conditions and its applications. **48** #11739

(*with* Young, Eutiquio C.) Unboundedness of solutions and comparison theorems for time-dependent quasilinear differential matrix inequalities. **50** #742

Ch'ên, Hsiu Hsiung Oscillation theorems of the second order differential inequalities. **54** #10814

Collatz, Lothar Monotonicity with discontinuities in partial differential equations. **54** #7994

Conway, Edward D. (*with* Smoller, Joel A.) A comparison technique for systems of reaction-diffusion equations. **56** #3436

Díaz, Joaquin B. (*with* Dunninger, D. R.) Sturmian theorems for a class of elliptic equations of order $4m$. **57** #10181

(*with* Dunninger, D. R.) Sturm separation and comparison theorems for a class of fourth order ordinary and partial differential equations. **53** #982

Dunninger, D. R. Sturmian theorems for parabolic inequalities. (Italian summary) **45** #3909

A Picone identity for non-self-adjoint elliptic operators. (Italian summary) **45** #8974

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Gusarov, A. L. Comparing the solutions of parabolic equations. (Russian. English summary) **56** #12527

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Kahane, Charles S. Oscillation theorems for solutions of hyperbolic equations. **48** #2537
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(*with* Travis, Curtis C.) Oscillation criteria for selfadjoint elliptic equations. **47** #7189
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Noussair, E. S. (*with* Swanson, Charles A.) Oscillation theorems for vector differential equations. **46** #5807
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Oleĭnik, O. A. (*with* Radkevič, E. V.) The behavior at infinity of the solutions of certain systems of partial differential equations. (Russian) **53** #8630
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Pagan, Gordon Oscillation theorems for characteristic initial value problems for linear hyperbolic equations. (Italian summary) **51** #6103
An oscillation theorem for characteristic initial value problems in linear hyperbolic equations. **58** #29061
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Swanson, Charles A. Remarks on a comparison theorem of Kreith and Travis. **45** #3911
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Wong, Pui Kei Integral inequalities of Wirtinger-type and fourth-order elliptic differential inequalities. **46** #5808
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McLaughlin, Joyce R. *See* **Díaz, Joaquin B.**, (**58** #1377)
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Piepenbrink, John Rellich densities and an application to unconditionally nonosc
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Portnoy, Stephen L. On solutions to $u_t = Du + u^2$ in two dimensions. (**53** #1383
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35B10 Periodic solutions

Acquistapace, Paolo Soluzioni periodiche di un'equazione iperbolica non lineare. (English summary) **55** #3490
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Gould, Peter H. Oscillations in nonlinear parabolic systems. **58** #6632
Grebenikov, E. A. (*with* Šakibaliev, R. Š.) The existence of periodic solutions of
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(*with* Šakibaliev, R. Š.) The existence of asymptotic solutions of a certain
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Periodic solutions to reaction-diffusion equations. **52** #11281
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Hall, William S. (*with* Hausrath, Alan R.) A Rayleigh wave equation. **58** #174
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Hastings, Stuart On the existence of homoclinic and periodic orbits for the Fitzhugh-Nagumo equations. **52** #14568

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Havlová, J. On periodic solutions of nonlinear parabolic equations. **50** #744

Hecquet, Gérard Contribution à la recherche des solutions périodiques en x_1 de l'équation $u_{x_1\cdots x_n}=f(x_1,\cdots,x_n,u,u_{x_1},\cdots,u_{x_n},u_{x_1x_2},\cdots,u_{x_2\cdots x_n})$. **47** #9027a

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Sur l'existence des solutions périodiques en x de l'équation $u_{x^2y^2}=f(x,y,u,u_x,u_y,u_{x^2},u_{xy},u_{y^2},u_{x^2y},u_{xy^2})$. **58** #22965

Horak, M. G. *See* **Aziz, A. K.**, **47** #605

Iftimie, Viorel Sur les solutions périodiques des équations pseudo-différentielles. **58** #22966

Janovskiĭ, L. P. Periodic solutions of a quasilinear parabolic problem in the case of second order growth of the nonlinearity with respect to the derived solutions. (Russian) (See RŽMat **1974** #5 B426; MR **57** #9376)

Jumarie, Guy Condition d'existence et de stabilité pour les solutions périodiques de certaines équations aux dérivées partielles non linéaires. **45** #5529

Conditions d'existence et de stabilité pour les solutions périodiques de certaines équations aux dérivées partielles non linéaires. **45** #5530

Kakita, Takao On the existence of time-periodic solutions of some non-linear evolution equations. **56** #12529

Klimov, V. S. Continuous branches of periodic solutions of quasilinear parabolic equations. (Russian) **49** #793

Periodic and stationary solutions of quasilinear parabolic equations. (Russian) **54** #690

Kobzarev, V. I. *See* **Zagorskiĭ, T. Ja.**, **58** #29069

Kočina, N. N. A certain periodic solution of the diffusion equation. (Russian) **45** #2301

Kopáčková, Marie On periodic solutions of some equations of mathematical physics. **47** #606

(*with* Vejvoda, Otto) Periodic vibrations of an extensible beam. (Czech and loose Russian summaries) **58** #11832

Krasnodembskiĭ, A. M. Periodicity of the solutions of a certain type of first order linear partial differential equations. (Russian) **58** #29064

Krylová, N. (*with* Vejvoda, Otto) Periodic solutions to partial differential equations, especially to a biharmonic wave equation. **49** #794

Mal'cev, A. P. The convergence of the Rothe method in the construction of a bounded, almost periodic and periodic solution of a boundary value problem of parabolic type. (Russian. English summary) **46** #2198

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Melrose, Richard B. (*with* Pemberton, Malcolm) Periodic solutions of certain nonlinear autonomous wave equations. **52** #14569

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Moseenkov, B. I. Construction method and structure of asymptotic approximations of solutions of nonlinear mixed boundary value problems in the investigation of multifrequency oscillation regimes. (Russian) **46** #5809

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Nakao, Mitsuhiro Periodic solutions of some systems of semilinear partial differential equations in complex domains. **46** #3962

Remarks on the existence of periodic solutions on nonlinear wave equations. **51** #13413

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On some regularity of periodic solutions of nonlinear wave equations. **51** #10828

Bounded, periodic or almost-periodic solutions of nonlinear hyperbolic partial differential equations. **57** #10182

Neustupa, Jiří The uniform exponential stability and the uniform stability at constantly acting disturbances of a periodic solution of a wave equation. **55** #8524

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Rabinowitz, Paul H. Existence of periodic solutions for some nonlinear hyperbolic partial differential equations. **52** #14570

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Roseau, Maurice Solution quasi périodique de système différentiel non linéaire dans le cas de résonance. **46** #496

Šakibaliev, R. Š. (*with* Tažimuratov, I.) The existence of periodic solutions of a certain system of partial differential equations. (Russian) **48** #11741

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A modified C. Siegel method for certain systems of nonlinear partial differential equations. (Russian) **51** #3658

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Sartabanov, Ž. A. (*with* Umbetžanov, D. U.) The construction of a multiperiodic solution of a certain countable system of partial differential equations. (Russian. Kazakh summary) **50** #10506

Seidman, Thomas I. Periodic solutions of a non-linear parabolic equation. **57** #10184

Soltanov, K. N. Periodic solutions of certain nonlinear parabolic equations with implicit degeneracy. (Russian) **51** #13414

Şowunmi, C. O. A. On the existence of periodic solutions of the equation $\rho_{tt}u-(\sigma(u_x))_x-\lambda u_{xtx}-f=0$. (Italian summary) **55** #3491

Staude, Ulrich Kleine periodische Lösungen bei nichtlinearen stark-elliptischen Systemen von partiellen Differentialgleichungen. I. (English summary) **45** #3912

Štědrý, Milan (*with* Vejvoda, Otto) Periodic solutions to weakly nonlinear autonomous wave equations. **52** #14571

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Stokes, Arnold P. Local coordinates around limit cycles of partial differential equations. **54** #691

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Troy, William C. Large amplitude periodic solutions of a system of equations derived from the Hodgkin-Huxley equations. **58** #29066

Ts'ai, Lung I Periodic solutions of nonlinear parabolic differential equations. **57** #6772

Tulegenova, M. B. *See* **Umbetžanov, D. U.**, **51** #3659

Tursunov, K. N. A study of the periodic (in time) generalized solution of a multidimensional boundary value problem for second order hyperbolic equations with a nonlinear operator right-hand side. (Russian) **58** #29067

A study of the periodic (in time) solution almost everywhere of a multidimensional boundary value problem for a class of second order hyperbolic equations with a nonlinear operator right-hand side. (Russian) **58** #29068

Umbetžanov, D. U. A construction of a multiperiodic solution of a certain system of quasilinear partial differential equations. (Russian. Kazakh summary) **45** #7235

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Yamaguchi, Masaru On the existence of quasiperiodic solutions of nonlinear hyperbolic partial differential equations. **47** #608

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Zagorskiĭ, T. Ja. (*with* Kobzarev, V. I.) Periodic solutions of a parabolic system. (Russian) **58** #29069

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(*with* Iosif′jan, G. A.) On singularities at the boundary points and uniqueness theorems for solutions of the first boundary value problem of elasticity. **58** #1531

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Gel'man, I. V. (*with* Maz'ja, V. G.) Estimates on the boundary for differential operators with constant coefficients in a half-space. (Russian) (**50** #5164)

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Guščin, A. K. Estimates from below for the solutions of boundary value problems for a parabolic equation. (Russian) (**47** #3845)

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Ivert, Per-Anders A priori Schranken für die Ableitungen der Lösungen gewisser elliptischer Differentialgleichungssysteme. (English summary) (**57** #6827)

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Simonenko, I. B. Justification of the averaging method for the convection problem in a field of rapidly oscillating forces and for other parabolic equations. (Russian) (**45** #4218)
Strelitz, Shlomo ★Асимптотические свойства аналитических решений дифференциальных уравнений. (Russian) [Asymptotic properties of analytic solutions of differential equations] (**58** #17268)
(Vdovičenko, N. V.) *See* **Glansdorff, P.; et al.**, (**57** #18652)

35Cxx Representations of solutions

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Ergebnisse einer Tagung über "Funktionentheoretische Methoden bei partiellen Differentialgleichungen" ★Ergebnisse einer Tagung über "Funktionentheoretische Methoden bei partiellen Differentialgleichungen" (Universität Bonn, Bonn, 19.–21. Oktober 1972). **49** #11017
Function-theoretic methods in partial differential equations *See* **Ergebnisse einer Tagung über "Funktionentheoretische Methoden bei partiellen Differentialgleichungen"**, **49** #11017
Partial differential equations *See* **Ergebnisse einer Tagung über "Funktionentheoretische Methoden bei partiellen Differentialgleichungen"**, **49** #11017

Secondary classifications:

Gilbert, Robert Pertsch ★Constructive methods for elliptic equations. (**56** #6094)
Gröbner, Wolfgang ★Differentialgleichungen. II. (**58** #22951)

35C05 Solutions in closed form

Alidema, Rašit I. Linearization of nonlinear partial differential equations. (Serbo-Croatian. English summary) **57** #13132
Aliev, N. A. (*with* Bagirov, G. A.) Residual representation of the solutions of problems posed for a second order equation in four-dimensional space. (Russian. Azerbaijani and English summaries) **56** #6073
Bagirov, G. A. *See* **Aliev, N. A.**, **56** #6073
Bauer, Karl Wilhelm Differentialoperatoren bei partiellen differentialgleichungen. **57** #845
Bondarenko, B. A. Basic systems of polynomial solutions of certain partial differential equations. (Russian. Uzbek summary) **48** #9069
Application of a class of special polynomials to the solution of the Cauchy problem for the multiwave equation. (Russian) **58** #6642
A certain class of quasipolynomial functions. (Russian) **53** #11202
Quasipolynomial solutions of the Cauchy-Nicolescu and the Cauchy problem for multilinear partial differential equations. (Russian) **58** #22977
Dobrovol′s′kiĭ, V. O. Solution of partial differential equations of prescribed type. (Russian) **58** #29095
Dombrovskiĭ, G. A. On the question of the explicit integration of second order linear partial differential equations. (Russian) **51** #6106
Galicyn, A. S. (*with* Žukovskiĭ, A. N.) Explicit form of the solutions of some boundary value problems for the heat equation in elliptic coordinates. (Russian) **58** #22978
Genev, Violet The applicability of biharmonic polynomials to the solution of the mixed problem of planar elasticity theory. (Russian. Bulgarian and English summaries) **58** #29096
Grudo, È. I. An analogue of the equations of Fuchs type for second order total differential equations. (Russian) **45** #2245
Hodžanijazov, D. H. Two classes of exact solutions of the generalized heat equation and its iterations. (Russian) **58** #17463
Jank, Gerhard Some function theoretical aspects in the theory of partial differential equations. **54** #13282
On integro-differential-operators for partial differential equations. **58** #1536
Kasimov, F. A. The complex representation of the solution of a fifth order equation. (Russian. Azerbaijani summary) **51** #3666
Kečkić, Jovan D. Notes on partial differential equations. II. General solutions for two classes of second-order nonlinear equations. **53** #11203
Kocić, Vlajko Lj. General solutions of certain nonlinear partial differential equations. **57** #3584
Some examples for nonlinear superposition. **57** #3586
Theorems on nonlinear superpositions: the general first order equation. **57** #3585
Kreyszig, Erwin Representations of solutions of certain partial differential equations related to Liouville's equation. **57** #846
Kučerenko, V. V. Some properties of the short wave asymptotic behavior of the fundamental solution of the equation $[\Delta+k^2n^2(x)]u=0$. (Russian) **57** #3587
Lanckau, Eberhard Allgemeine exakte Integration einer partiellen Differentialgleichung 6. Ordnung aus der Turbulenztheorie. **58** #11843
Nazarov, G. I. (*with* Pučkov, A. A.; Pučkova, N. G.) Differential and integral forms of the solution of a fourth order linear partial differential equation. (Russian) **56** #12537
Plačko, E. P. Solution of nonstationary problems of diffusion in wedge-shaped domains by means of the Hankel transform. (Russian) **50** #13852
Pučkov, A. A. *See* **Nazarov, G. I.; et al.**, **56** #12537
Pučkova, N. G. *See* **Nazarov, G. I.; et al.**, **56** #12537
Sachdev, P. L. Some exact solutions of Burgers-type equations. **56** #6074
Šapkarev, Ilija A. Polynome vom Grad n als vollständige Integrale der linearen partiellen Differentialgleichungen der Ordnung n. **51** #13422
Savbjanova, R. A. A method for the exact solution of a biharmonic problem. (Russian) **58** #29097
Schmidt, Adam Linear differential equations with constant coefficients in two independent variables. **58** #29098
Stel′mašuk, N. T. Solution of some systems of partial differential equations. (Russian) **57** #10191
Titov, S. S. Solutions of nonlinear partial differential equations in the form of polynomials in one of the variables. (Russian) **56** #12538
Žukovskiĭ, A. N. *See* **Galicyn, A. S.**, **58** #22978
Žumabekov, L. Ž. A mixed boundary value problem for a system on the rectangle. (Russian) **58** #11844

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Berezovs′kiĭ, A. A. (*with* Net′osova, T. M.) Invariant solutions of a certain quasilinear equation. (Russian) (**56** #12523)
Bicadze, A. V. A boundary value problem for the Helmholtz equation. (Russian) (**58** #1570)
Īts, A. R. (*with* Kotljarov, V. P.) Explicit formulas for solutions of a nonlinear Schrödinger equation. (Russian. English summary) (**57** #16960)
Jank, Gerhard Investigating the solutions of certain elliptic differential equations by complex analytic methods. (**58** #11874)
Kaiser, Hans K. (*with* Lidl, Rudolf) Die Polynomlösungen spezieller partieller Differentialgleichungen. (English summary) (**53** #368)
Kotljarov, V. P. *See* **Īts, A. R.**, (**57** #16960)
Lidl, Rudolf *See* **Kaiser, Hans K.**, (**53** #368)
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Orlov, Konstantin Example of solving of the boundary value problems for one partial differential equation with two unknown functions. (**58** #29124)
Some theorems concerning partial differential equations. (**57** #10179)
Shah, Manilal Jacobi polynomial and potential theory. (**46** #420)
Šveckiĭ, M. V. The functionally invariant solutions of a second order quasilinear partial differential equation. (Russian) (**57** #10207)

35C10 Series solutions, expansion theorems

Agarwal, G. S. (*with* Devaney, A. J.; Pattanayak, D. N.) On the solution of the partial differential equation $\Pi_{i=1}^{N}(\nabla^2+k_i^2)\psi=0$. **48** #2540
Al′muhambetov, K. K. Asymptotic expansion of the solution of a certain mixed problem of hyperbolic type with a small parameter in the "resonance" case. (Russian) **56** #12539
Bahvalov, N. S. Averaging of partial differential equations with rapidly oscillating coefficients. (Russian) **52** #976
Baĭkuziev, Kahhar (*with* Kalanov, B. S.) A mixed problem for a linear equation of higher order that degenerates on the boundary of the domain. (Russian) **47** #3806
Bauer, Karl Wilhelm Allgemeine Darstellungssätze bei einer Klasse partieller Differentialgleichungen gerader Ordnung. **46** #9506
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Chen, Yung-ming An oscillation criterion for the second-order nonlinear differential equation $x''+xF(x'^2,x^2,t)=0$. **48** #8954 (E **56** #743)
Chikwendu, S. C. (*with* Kevorkian, J.) A perturbation method for hyperbolic equations with small nonlinearities. **51** #10834
Darevskiĭ, V. M. Representation of functions of two variables by means of differentiable trigonometric series for the solution of partial differential equations. (Russian) **47** #611
A certain method for the solution of partial differential equations. (Russian) **49** #5534
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Džoldykaraev, K. B. Representation of the Green's function by rapidly converging bilinear series. (Russian. Uzbek summary) **51** #6107

Egupov, N. D. (*with* Dmitriev, A. N.) Algorithms for the determinate analysis of dynamical systems with constant and variable coefficients. (Russian) **56** #6075

Erofeenko, V. T. The connection between fundamental solutions in cylindrical and spherical coordinates of the Helmholtz and Laplace equations. (Russian) **47** #612

(*with* Kardaš, S. N.) Formulas for the mutual re-expansion of spherical and cylindrical solutions of Maxwell equations. (Russian) **58** #17464

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Fil'čakov, P. F. *See* **Lipovoĭ, G. S.**, **56** #12540

Florian, Helmut (*with* Heersink, Rudolf) Über eine partielle Differentialgleichung mit $P+2$ Variablen und deren Zusammenhang mit den allgemeinen Kugelfunktionen. (English summary) **51** #8599 (EA **52**)

Frischbier, Reinhard (*with* Hieke, Hermann) Die Reduktion der Integrale der Gleichung $\Delta u\ (x,y)+k^2\ u\ (x,y)=0$ auf solche der Potentialgleichung $\Delta u\ (x,y)=0$. **49** #9387

Froim, V. H. Linear scalar partial differential equations with regular singularities on a hyperplane. (Russian) **48** #4475

Gadžiev, S. G. Investigation of the weak solution of a certain mixed problem. (Russian. Azerbaijani summary) **50** #10514

Gluščenko, A. A. (*with* Ševčenko, V. Ī.) An approximate solution of certain spatial boundary value problems for equations of elliptic type. (Ukrainian. English and Russian summaries) **55** #829

Gor'kov, Ju. P. *See* **Il'in, A. M.; et al.**, **51** #8600

Grasman, J. An elliptic singular perturbation problem with almost characteristic boundaries. **50** #5159

Gronau, Detlef (*with* Reich, Ludwig) Über Existenz und Eindeutigkeit von regulären Lösungen nichtlinearer partieller Differentialgleichungen bei Vorgabe konvergenter Potenzreihenränder. **52** #14575

Über regulär-singuläre logarithmenbehaftete Lösungen einer Klasse linearer partieller Differentialgleichungen im Komplexen. **52** #14574

(*with* Reich, Ludwig) Über lokale regulär-singuläre Lösungen einer Klasse linearer partieller Differentialgleichungen zweiter Ordnung im Komplexen. **53** #3477

See also **Reich, Ludwig**, **57** #847

Grudo, È. I. The asymptotic solutions of certain systems of partial differential equations. (Russian) **50** #10515

Haimo, Deborah Tepper Series expansions for dual Laguerre temperatures. **47** #613

Harvey, Reese (*with* Polking, John C.) A Laurent expansion for solutions to elliptic equations. **47** #9031

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Höppner, Wolfgang Die charakteristische Problemstellung für lokale Lösungen partieller komplexer Differentialgleichungssysteme. **49** #9388

Il'in, A. M. (*with* Gor'kov, Ju. P.; Lelikova, E. F.) The method of matching asymptotic expansions. (Russian) **51** #8600

(*with* Lelikova, E. F.) The method of matching asymptotic expansions for the equation $\varepsilon\Delta u-a(x,y)u_y=f(x,y)$ in a rectangle. (Russian) **52** #3706

Ivasišen, S. D. Integral representations of the solutions of general parabolic boundary value problems, and correct solvability in spaces of increasing functions. (Ukrainian. English and Russian summaries) **50** #7773

Janušauskas, Algimantas Series in powers of one variable that satisfy partial differential equations. (Russian) **48** #4473

The completeness of special families of solutions of degenerate equations. (Russian) **48** #4474

A property of power series that satisfy partial differential equations. (Russian. Lithuanian and English summaries) **57** #13134

Kabacĭĭ, M. M. (*with* Markuš, Ī. Ī.) Asymptotic representation of the solution of the Cauchy problem for a second order linear hyperbolic equation with a small parameter multiplying the highest derivative with respect to the time coordinate. (Ukrainian. English and Russian summaries) **50** #7771

Kajiwara, Joji Some systems of partial differential equations in the theory of soil mechanics. **55** #8526

Kalanov, B. S. *See* **Baĭkuziev, Kahhar**, **47** #3806

Kalinjak, M. Ī. Asymptotic solution of the Cauchy problem for a quasilinear differential equation of parabolic type. (Ukrainian. Russian summary) **53** #8634

Kardaš, S. N. *See* **Erofeenko, V. T.**, **58** #17464

Kevorkian, J. *See* **Chikwendu, S. C.**, **51** #10834

Kleinman, Ralph E. Iterative solutions of boundary value problems. **57** #6781

Kleiza, Jonas Solution of a system of linear partial differential equations by Dirichlet series. (Russian. Lithuanian and English summaries) **47** #7194

Korolev, V. D. The approximate integration of partial differential equations with asymptotically constant coeficients. (Russian) **51** #13423

Kostenko, V. G. (*with* Veselovs'ka, O. O.) Integration of certain linear second order partial differential equations on the plane with variable coefficients. (Ukrainian. Russian summary) **53** #11204

Kunz, K. S. Application of an algebraic technique to the solution of Laplace's equation in three dimensions. **47** #615

Lelikova, E. F. *See* **Il'in, A. M.; et al.**, **51** #8600 *and* **Il'in, A. M.**, **52** #3706

Lipovoĭ, G. S. (*with* Fil'čakov, P. F.) The Cauchy problem for nonlinear partial differential equations. (Russian) **56** #12540

Lisicin, B. M. (*with* Lisicin, È. M.) The solution of a certain class of boundary value problems with mixed boundary conditions by the method of determining states. (Russian) **48** #9070

Lisicin, È. M. *See* **Lisicin, B. M.**, **48** #9070

Lo, Chi Yeung Series expansions of solutions of $U_{xx}+U_{yy}+\varepsilon^2U_{tt}=U_t$. **47** #3807

Markuš, Ī. Ī. *See* **Kabacĭĭ, M. M.**, **50** #7771

Nasibov, Š. M. (*with* Tugizov, D. M.) Formal higher order derivatives, and their application to the solutionof a certain class of linear partial differential equations. (Russian. Azerbaijani summary) **53** #987

Nemiš, Ju. M. A certain generalization of three-dimensional harmonic functions. (Russian) **47** #7195

Parihar, K. S. Solutions of certain hyperbolic and elliptic problems in terms of involving Jacobi polynomials and Bessel functions. **58** #1537

Pattanayak, D. N. *See* **Agarwal, G. S.; et al.**, **48** #2540

Pieczka, Wincenty On the general solution of some partial differential equatio two-variables domain. **50** #10516

Polking, John C. *See* **Harvey, Reese**, **47** #9031

Rabinovič, M. I. Multiwave interactions in nonlinear distributed systems. (Rus **52** #8631

Rasulov, M. L. Solution of one-dimensional linear mixed problems for a system coefficients constant in time. (Russian) **50** #7772

Reich, Ludwig (*with* Gronau, Detlef) Über die explizite Darstellung der Lösungen Klasse partieller Differentialgleichungen, insbesondere durch Reihenentwicklu **57** #847

See also **Gronau, Detlef**, **52** #14575; **Spindelböck, Klaus**, **52** #14576 *and* **Gronau, Detlef**, **53** #3477

Riekstiņa, V. *See* **Riekstiņš, E.**, **47** #3808

Riekstiņš, E. (*with* Riekstiņa, V.) Solution of a certain mixed problem and investiga of the asymptotic behavior of the solution. (Russian. Latvian and English summa **47** #3808

Rowe, E. G. Peter Spherical delta functions and multipole expansions. **58** #22979

Ševčenko, V. Ī. *See* **Gluščenko, A. A.**, **55** #829

Sidorov, A. F. Some representations of solutions of quasilinear hyperbolic equat (Russian) **58** #29100

Šilo, A. F. (*with* Stepančuk, V. F.) A boundary value problem with boundary condit of conjugation type. (Russian) **51** #8602

Sluijter, F. W. *See* **Verheggen, Th. M. M.; et al.**, **58** #1538

Spindelböck, Klaus (*with* Reich, Ludwig) Algebraisch verzweigte Lösungen einer linearen partiellen Differentialgleichung 2. Ordnung. **52** #14576

Steinberg, Stanly Applications of the Lie algebraic formulas of Baker, Campbell, Hausdorff, and Zassenhaus to the calculation of explicit solutions of partial differential equations. **57** #3588

Stepančuk, V. F. *See* **Šilo, A. F.**, **51** #8602

Taldykin, A. T. The solution of boundary value problems by means of approximat and expansions. (Russian) **54** #10822

Tang, Min Ming (*with* Fife, P. C.) Asymptotic expansions of solutions of quasi-lin elliptic equations with small parameter. **51** #10835

Temperley, D. J. (*with* Todd, L.) Some remarks on a class of plane, linear bound value problems. **56** #3441

Titov, S. S. The representation of the solutions of linear partial differential equation the form of finite sums. (Russian) **55** #3499

Todd, L. *See* **Temperley, D. J.**, **56** #3441

Tugizov, D. M. *See* **Nasibov, Š. M.**, **53** #987

Vaĭnberg, B. R. On the method of stationary phase. (Russian. English summary) **53** #8635

Verheggen, Th. M. M. (*with* Broer, L. J. F.; Sluijter, F. W.) Nonmonochromatic solutions of the spatially inhomogeneous wave equation based on the WKB approximation. **58** #1538

Veselovs'ka, O. O. *See* **Kostenko, V. G.**, **53** #11204

Volosov, V. M. An asymptotic scheme for a certain class of partial differen equations. (Russian) **49** #9389

Wall, D. J. N. Circularly symmetric Green tensors for the harmonic vector w equation in spheroidal coordinate systems. **58** #1539

Zauderer, Erich Asymptotic simplification and factorization of linear partial differen equations. **53** #988

Zeličenko, E. N. An asymptotic representation of the fundamental solution for equati of elliptic type with a small parameter multiplying the highest derivative. (Russi **51** #3667

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Bahvalov, N. S. Averaging of nonlinear partial differential equations with rap oscillating coefficients. (Russian) (**53** #13798)

Barański, Feliks (*with* Wachnicki, Eugeniusz) On certain boundary value problems the Orlicz space. (**50** #7781)

Butuzov, V. F. The asymptotic behavior of the solutions of singularly perturbed equations of elliptic type in a rectangular domain. (Russian) (**53** #984)

Colton, David L. (*with* Watzlawek, Wolfgang) Complete families of solutions to the equation and generalized heat equation in $\mathbf{R}^n$. (**56** #854)

Comstock, Craig Singular perturbation of elliptic equations. II. (**52** #6175)

Demidov, A. S. Construction of the asymptotic form of the solution of a boundary va problem for elliptic pseudodifferential equations with a small parameter multiply the highest operator. (Russian. English summary) (**50** #10581)

Èĭdel'man, S. D. (*with* Pletn'ova, T. G.) Bôcher's theorem for positive solutions elliptic equations of arbitrary order. (Russian) (**52** #11311)

Fichera, G. (*with* Ricci, Paolo Emilio) The single layer potential approach in the the of boundary value problems for elliptic equations. (**58** #29173)

Fife, P. C. Semilinear elliptic boundary value problems with small parameters. (**51** #10863 (EA **52**))

Filippi, Paul Solution élémentaire de l'équation de Helmholtz à indice variable. (**48** #4488)

Il'in, A. M. A boundary value problem with a small parameter. (Russian) (**57** #862

Ĭosipčuk, N. D. (*with* Sjavavko, M. S.) A certain class of equations in functio derivatives. (Russian) (**49** #5607)

Kleiza, Jonas The representation of the solution of a Cauchy problem by a Hart series. (Russian. Lithuanian and English summaries) (**54** #10640)

Kozmanov, M. Ju. Method of solution of certain boundary value problems for hyperbolic systems of quasilinear equations of first order with two variables. (**52** #6198)

Lun, E. *See* **Pogorzelski, R. J.**, (**54** #6690)

Maz'ja, V. G. (*with* Plamenevskiĭ, B. A.) The pseudo-analyticity of the solutions of elliptic equations in the space $\mathbf{R}^n$. (Russian. Georgian and English summaries) (**58** #29167)

McCoy, Peter A. Extremal properties of real axially symmetric harmonic functions in E^3. (**56** #15958)

Pervak, V. D. *See* **Valēēv, Kim G.**, (**58** #17452)

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Pleṫn'ova, T. G. *See* **Èĭdel'man, S. D.**, (**52** #11311)

Pogorzelski, R. J. (*with* Lun, E.) On the expansion of cylindrical vector waves in terms of spherical vector waves. (**54** #6690)

Ricci, Paolo Emilio *See* **Fichera, G.**, (**58** #29173)

Sjavavko, M. S. *See* **Ĭosipčuk, N. D.**, (**49** #5607)

Slesarenko, A. P. The solution of linear and nonlinear heat conduction problems for nonclassical domains. (Russian) (**58** #17535)

Štaras, A. L. Asymptotic integration of weakly nonlinear partial differential equations. (Russian) (**58** #29090)

Tužilin, A. A. Asymptotic expansions of the solution of the problem of the radiation of waves by the vibrating edges of an arbitrary wedge. (Russian) (**45** #7238)

Vaindiner, A. I Generalized polynomials that deviate least from zero, and efficient direct methods of solution of boundary value problems. (Russian) (**48** #2628)

Valēēv, Kim G. (*with* Pervak, V. D.) The study of the stability of the solutions of linear partial differential equations with periodic coefficients. (Russian) (**58** #17452)

Wachnicki, Eugeniusz *See* **Barański, Feliks**, (**50** #7781)

Wachulka, Adam Homogeneous quasi-p-harmonic polynomials of two variables. (Polish. English and Russian summaries) (**47** #5438)

The mean value for the solutions of certain elliptic equations of order p. (Polish. English and Russian summaries) (**47** #5439)

Watzlawek, Wolfgang *See* **Colton, David L.**, (**56** #854)

Žemuhov, H. K. Expansion of the solutions of an elliptic equation in the derivatives of the fundamental solution. (Russian) (**54** #13304)

35C15 Integral representations

Ahiev, S. S. (*with* Ahmedov, K. T.) Integral representation of the solutions of certain systems of differential equations. (Russian. Azerbaijani and English summaries) **52** #14577

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Alimov, A. L. A representation of the solution of a boundary value problem as a path integral. (Russian) **58** #29101

(Atkinson, Kendall E.) *See* **Gilbert, Robert Pertsch**, **52** #977

Avantaggiati, Antonio Rappresentazione integrale delle soluzioni in un angolo delle equazioni a derivate parziali in due variabili a coefficienti costanti. (English summary) **47** #3809

Bauer, Karl Wilhelm (*with* Florian, Helmut) Bergman-Operatoren mit Polynomerzeugenden. (English summary) **58** #1540

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Bhatnagar, S. C. (*with* Gilbert, Robert Pertsch) A method of ascent for a class of sixth order elliptic equations. **53** #989

(*with* Gilbert, Robert Pertsch) Bergman type operators for pseudoparabolic equations in several space variables. **57** #10192

(*with* Gilbert, Robert Pertsch) Integral operators generating solutions of $D_3^2u_t+AD_3u_t+BD_3u+Cu=0$. (Serbo-Croatian summary) **56** #12541

(*with* Gilbert, Robert Pertsch) Constructive methods for solving $\Delta_4^2u+A\Delta_4u_t+Bu_t+C\Delta_4u+Du=0$. **57** #3589

(*with* Gilbert, Robert Pertsch) Bergman type operators for pseudoparabolic equations in several space variables. **58** #22980

Božinov, N. S. Operational calculus for the general linear partial differential operators of the first order. **56** #3442

Brown, Patrick M. (*with* Gilbert, Robert Pertsch) Constructive methods for higher order, analytic, Sobolev-Galpern equations. **55** #8527

(*with* Gilbert, Robert Pertsch; Hsiao, George C.) Constructive function theoretic methods for fourth order pseudoparabolic equations in two space variables. (Italian summary) **53** #6069

Integral operators for fourth order linear parabolic equations. **57** #6782

Bugrov, Ja. S. Properties of solutions of differential equations of higher order in terms of weight classes. (Russian) **50** #13853

Čerskiĭ, Ju. I. Boundary value problems, and integral equations that can be solved by the factorization method. (Russian) **56** #12542

Colton, David L. On the analytic theory of a class of singular partial differential equations. **49** #805

(*with* Gilbert, Robert Pertsch) New results on the approximation of solutions to partial differential equations: the method of particular solutions. **52** #14578

(*with* Gilbert, Robert Pertsch) Integral operators and complete families of solutions for $\Delta_{p+2}^2U(X)+A(r^2)\Delta_{p+2}\,u(x)+B(r^2)u(x)=0$. **48** #9071 (E **50** #5160)

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Kazarjan, G. G. The zeros of polynomials of several variables. (Russian) (**53** #6072)

Kinderlehrer, David *See* **Brézis, Haïm,** (**50** #13881)

Košelev, A. I. The continuity of the solutions of quasilinear second order elliptic systems. (Russian) (**58** #29192)

Kučera, Milan (*with* Nečas, Jindřich) Interior regularity of solutions to systems of variational inequalities. (Loose Russian summary) (**56** #834)

Lascar, Richard Propagation des singularités pour une classe d'opérateurs pseudo-différentiels à caractéristiques de multiplicité variable. (English summary) (**54** #14010)

Lions, Jacques-Louis Interpolation linéaire et non linéaire et régularité. (**58** #2352)

Mattera, Claude Régularité pour des problèmes elliptiques singuliers. (English summary) (**55** #845)

Mel'nikova, Ju. S. The behavior of the solution of a second order elliptic equation in the neighborhood of a corner point. (Russian. English summary) (**46** #7697)

Murthy, M. K. Venkatesha Pseudo differential operators on Gevry spaces and regularity for elliptic boundary value problems. (**46** #9573)

Nečas, Jindřich *See* **Kučera, Milan,** (**56** #834)

Nguyên Phuong Các On the Hölder continuity of generalized solutions of a quasilinear elliptic equation. (**54** #3155)

Otelbaev, M. O. *See* **Kal'menov, T. Š.,** (**57** #10230)

Pehkonen, Erkki Über die linearen partiellen quasielliptischen Differentialoperatoren mit konstanten Koeffizienten. (**58** #1554)

Sarason, Leonard Weak equals strong for first-order linear pseudodifferential boundary value problems. (**47** #9103)

Ščerbina, V. P. Partial regularity of the solutions of a class of nondivergent quasilinear elliptic equations. (Russian) (**57** #6822)

Scheffer, Vladimir Partial regularity of solutions to the Navier-Stokes equations. (**56** #12677)

Simon, Jacques Régularité de solutions de problèmes nonlinéaires. (English sun (**56** #13011)

Sjöstrand, Johannes *See* **Baouendi, M. S.,** (**58** #23050)

Stampacchia, Guido Recent results in the theory of variational inequalities. (**56** #

Tartakoff, David S. *See* **Derridj, Makhlouf,** (**54** #1312)

Todorov, T. G. The smoothness of generalized solutions of higher order quas elliptic systems. (Russian) (**53** #13832)

Ton, Bui An On the Hölder-continuity of solutions of a nonlinear parabolic vari inequality. (**51** #13457)

Treves, F. Équations elliptiques fuchsiennes du second ordre et valeurs propres asymptotiques. (**55** #10872)

Tyšlek, V. N. Hölder continuity of the solutions of elliptic variational inequ (Russian) (**57** #6818)

Uhlenbeck, Karen Regularity theorems for solutions of elliptic polynomial equ (**54** #1288)

Vaĭnbrand, G. I. Some properties of the generalized solution of a boundary problem of conjugacy for a degenerate differential equation. (Russian) (**58** #

Voinov, Ju. N. Boundedness near the boundary of the gradients of generalized so of boundary value problems for quasilinear elliptic equations. (Russian. I summary) (**52** #1001)

von Wahl, Wolf Regularity of weak solutions to parabolic equations of arbitrary (**55** #10854)

Wenk, Hans-Ullrich Über Regularität nichtlinearer Schwingungen dünner elas Platten. (**58** #19600)

Yau, Shing Tung *See* **Cheng, Shiu Yuen,** (**55** #10727)

Zuily, Claude *See* **Derridj, Makhlouf,** (**58** #23764)

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Bony, Jean-Michel (*with* Schapira, Pierre) Problème de Cauchy, existence et prolongement pour les hyperfonctions solutions des équations hyperboliqu strictes. **45** #7241

Dias, João-Paulo Une minoration sur la frontière de la solution d'une équation problème de Signorini. **46** #2207

Èĭdel'man, S. D. *See* **Pletn'ova, T. G.,** **47** #7200

Fenyő, István (*with* Schmidt, Adam) Über gewisse partielle Differentialgleichun Bereich der Distributionen. **45** #7242

Infantino, Roberto Sulle singolarità eliminabili per le soluzioni deboli delle eq lineari ellittiche di ordine $2m$. (English summary) **45** #7243

Kawai, Takahiro Construction of elementary solutions for I-hyperbolic operato solutions with small singularities. **45** #7244

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Kolodiĭ, Ī. M. The boundedness of generalized solutions of elliptic differential equ (Russian. English summary) **45** #8980

Komatsu, Hikosaburo (*with* Kawai, Takahiro) Boundary values of hyperfunction solutions of linear partial differential equations. **46** #5817

Kovrižkin, V. V. Weak solutions of the Darboux problem. (Russian) **45** #8981

Kozlova, O. N. A theorem on the summability of the positive solutions of a sys degenerate differential equations with Douglis-Nirenberg structure in domains piecewise smooth boundary. (Russian) **53** #13810

Pletn'ova, T. G. (*with* Èĭdel'man, S. D.) The solutions of certain elliptic equatio are positive in the neighborhood of an isolated singular point. (Russian) **47** #

Schapira, Pierre *See* **Bony, Jean-Michel,** **45** #7241

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Vorovič, L. S. Behavior of the solution of the problem of shock at corner points contour. (Russian) **57** #16938

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Coffman, Charles V. (*with* Duffin, Richard J.; Mizel, Victor J.) Nonuniformly equations: Positivity of weak solutions. (**47** #3825)

Duffin, Richard J. *See* **Coffman, Charles V.; et al.,** (**47** #3825)

Guckenheimer, John Caustics and non-degenerate hamiltonians. (**50** #11316)

Il'in, E. M. Singularities of the weak solutions of elliptic boundary value problen discontinuous higher coefficients. (Russian) (**52** #14619)

Singularities of the weak solutions of elliptic equations with discontinuous coefficients. II. Corner points of the lines of discontinuity. (Russian. English summary) (**52** #14620)

Jakovlev, G. N. Certain properties of the generalized solutions of elliptic equat divergence form. (Russian) (**50** #10531)

Kolodiĭ, Ī. M. The boundedness of generalized solutions of parabolic differential equations. (Russian. English summary) (**46** #5827)

Konno, Reiji Non-existence of positive eigenvalues of Schrödinger operators in domains. (**49** #822)

Ljance, V. È. The uniqueness of the generalized solution of the system of equat gas dynamics. (Russian) (**49** #5585)

Meyer, Harold D. A representation for a distributional solution of the heat eq (**50** #10519)

Mikulec, A. T. Generalized solution of the Stefan problem for a system of equat parabolic type. (Russian) (**58** #23074)

Mišenkova, T. A. On the question of the type of the generalized solution of the D problem for an equation with an operator. (Russian) (**56** #12639)

Mizel, Victor J. *See* **Coffman, Charles V.; et al.,** (**47** #3825)

Mosco, Umberto Régularité forte de la fonction d'Hamilton-Jacobi du contrôle stochastique impulsionnel et continu. (English summary) (**57** #13644)

Roĭtberg, Ja. A. The limit values, along surfaces parallel to the boundary, generalized solutions of elliptic equations. (Russian) (**58** #1631)

35Exx Equations and systems with constant coefficients [See also 35N05.]

Ahmedov, Š. A. The continuation of the solutions of differential equations with constant coefficients. (Russian) **45** #5552

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Cole, Julian D. ★Методы возмущений в прикладной математике. (Russian) [Perturbation methods in applied mathematics] (**50** #6241)
Deržavina, A. I.) *See* **Cole, Julian D.**, (**50** #6241)
Diesperov, V. N.) *See* **Cole, Julian D.**, (**50** #6241)
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35E05 Fundamental solutions

Ahmedov, Š. A. The fundamental solution for a weakly hyperbolic operator. (Russian. Tajiki summary) **45** #702
Albinus, Günter Bemerkungen zu einer potentialtheoretischen Methode. **48** #2545
Cattabriga, Lamberto (*with* De Giorgi, Ennio) Soluzioni di equazioni differenziali a coefficienti constanti appartenenti in un semispazio a certe classi di Gevrey. (English summary) **54** #10825
Coclite, Mario M. Su una classe di operatori differenziali lineari a coefficienti constanti di tipo ipoellittico dipendenti da un parametro. **48** #6637
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On temperate fundamental solutions supported by a convex cone. **54** #10826
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Gal′pern, S. A. Fundamental solutions and lacunae of quasihyperbolic equations. (Russian) **54** #3142
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Kaneko, Akira On linear exceptional sets of solutions of linear partial differential equations with constant coefficients. **57** #6788
Kaper, Bob Nonlinear dispersive wave problems. **55** #3443
Kawai, Takahiro On the global existence of real analytic solutions of linear differential equations. I. **46** #9512
Klimenko, V. T. Construction of doubly branched fundamental solutions of the Cauchy problem of homogeneous rotation-invariant hyperbolic operators with constant coefficients. (Russian. English summary) **48** #6638
Liess, Otto The microlocal Cauchy problem for constant coefficient linear partial differential operators. **58** #29121
Malickaja, A. P. The connection between the fundamental solutions of pluriparabolic equations. (Russian) **49** #5538
Malikov, H. M. A necessary and sufficient condition for the solvability of the general system of linear partial differential equations with constant coefficients. (Russian. Tajiki summary) **50** #2666
Miwa, Tetsuji On the global existence of real analytic solutions of systems of linear differential equations with constant coefficients. **49** #11021
Muhlisov, F. G. Construction of the fundamental solution for certain equations of elliptic type. (Russian) **50** #2667
Nacinovich, Mauro Una osservazione su una congettura di De Giorgi. (English summary) **53** #3480
Papadopoulos, Michael A note on Green's matrices associated with homogeneous systems of linear partial differential equations with constant coefficients. **49** #5539
Persson, Jan The Cauchy problem and Hadamard's example. **57** #10200
Rezzouk, Abdenour Quelques propriétés du noyau d'un opérateur différentiel linéaire non hypoelliptique, à coefficients constants. **51** #6114
Satyanarayana Rao, A. Elementary solutions of certain types of homogeneous partial differential equations with constant coefficients. **46** #7693
Yamada, Haruki Minimal singular sets for linear differential operators with constant coefficients. **57** #3598
Zanghirati, Luisa Sulla regolarità in semispazi di una soluzione fondamentale di certi operatori differenziali lineari a coefficienti costanti. (English summary) **56** #828

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Berg, I. D. Another proof that the minimal operator has a left inverse. (**54** #3507)
Ciorănescu, Ioana Sur les équations de convolution du type hyperbolique. (**57** #7157)
Dufresnoy, Alain Un résultat de d''-cohomologie; applications aux systèmes differentiels à coefficients constants. (English summary) (**57** #714)
Dwyer, Thomas A. W., III Differential equations of infinite order in vector-valued holomorphic Fock spaces. (**58** #2266)
Gérard, Paul (*with* Rifaut, Évelyne) Sur les solutions élémentaires des opérateurs matriciels de dérivation fortement elliptiques. (English summary) (**58** #1597)
Lanconelli, Ermanno Su una classe di moltiplicatori di $\mathcal{F}L_p$ ed applicazioni. (English summary) (**47** #694)
Ōshima, Toshio On the global existence of solutions of systems of linear differential equations with constant coefficients. (**50** #5863)
Petersen, Bent E. Holomorphic functions with growth conditions. (**52** #784)
Raïs, Mustapha Solutions elémentaires invariantes. (**57** #7707)
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Schmidt, Adam Linear differential equations with constant coefficients in two independent variables. (**58** #29098)
Sjögren, Peter Solution fondamentale d'un opérateur différentiel en dimension infinie. (English summary) (**56** #3682)
Struble, Raimond A. Operator homomorphisms. (**48** #4725)
Trione, Susana Elena Soluzioni elementari causali dell'operatore di Klein-Gordon iterato. (English summary) (**52** #11585)
Tsuji, Mikio Fundamental solutions of mixed problems for hyperbolic equations with constant coefficients. (**52** #8663)

35E10 Convexity properties

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Hörmander, L. On the singularities of solutions of partial differential equations with constant coefficients. **48** #11745
On the existence of real analytic solutions of partial differential equations with constant coefficients. **49** #817
Kaneko, Akira On continuation of regular solutions of partial differential equations to compact convex sets. I, II. **47** #5421
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On continuation of regular solutions of partial differential equations with constant coefficients. **49** #5540
Kazarjan, G. G. The zeros of polynomials of several variables. (Russian) **53** #6072
Littman, Walter Décroissance à l'infini des solutions, à l'extérieur d'un cône, d'équations aux dérivées partielles à coefficients constants. (English summary) **58** #22989
Persson, Jan A sufficient geometric condition for a set to be P-convex in R^n. **46** #3968
Semi-global null solutions and P-convexity. (Italian summary) **49** #5541 (E **53** #3481)
Correction of: "Semi-global null solutions and P-convexity" (Boll. Un. Mat. Ital. (4) **8** (1973), 20–28). (Italian summary) **53** #3481
Unterberger, André Ouverts stablement convexes par rapport à un opérateur différentiel. **45** #7254
Problèmes de convexité pour les opérateurs différentiels à coefficients constants. **57** #16939
Ouverts stablement convexes par rapport à un opérateur différentiel. (English summary) **49** #11022
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Secondary classifications:

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Kawai, Takahiro Extension of hyperfunction solutions of linear differential equations with constant coefficients. (**54** #11405)
Kiselman, Christer O. Functionals on the space of solutions to a differential equation with constant coefficients. The Fourier and Borel transformations. (**58** #28561)
Unterberger, André Sobolev spaces of variable order and problems of convexity for partial differential operators with constant coefficients. (**52** #14583)

35E15 Initial value problems

Ahmedov, Š. A. The uniqueness of the solutions of differential equations with constant coefficients. (Russian. Tajiki summary) **47** #2181
The uniqueness of the solution of the noncharacteristic Cauchy problem in a class of generalized functions. (Russian. Tajiki summary) **48** #6639
The solvability of the Cauchy problem with generalized initial data. (Russian. Tajiki summary) **48** #6640
The uniqueness of the continuation of generalized solutions of differential equations that are given in the neighborhood of characteristic subspaces. (Russian. Tajiki summary) **51** #6115
The solvability of the Cauchy problem in a class of generalized functions of infinite order. (Russian. Tajiki summary) **51** #6116
Asada, Akira An explicit formula of the solution of constant coefficients partial differential equation with the meromorphic Cauchy data. **58** #17474
Berechet, Oprea Le problème de Cauchy pour opérateurs semi-elliptiques. **46** #502
Birkeland, Bent A Cauchy problem for analytic functionals. **57** #10201
Borok, V. M. (*with* Perel′man, M. A.) Unique solution classes for a multipoint boundary value problem in an infinite layer. (Russian) **48** #9074
Cattabriga, Lamberto Sull'esistenza di soluzioni analitiche reali di equazioni a derivate parziali a coefficienti costanti. **58** #22990
Cavallucci, Angelo Sul problema di Cauchy non corretto secondo Gelfand e Shilov. **49** #9397
Caratterizzazione alla Paley-Wiener dei dati ai limiti per certi problemi ben posti secondo Shilov. **50** #10520
Fridlender, V. R. The normal form of Cauchy systems. (Russian) **57** #3599
Furuya, Hitoshi (*with* Nagumo, Mitio) On Cauchy problem for a system of linear partial differential equations with constant coefficients. **56** #12549
Hörmander, L. Non-uniqueness for the Cauchy problem. **54** #7997
Kosarev, N. G. The Cauchy problem for systems of linear differential equations of Sobolev-Gal′pern type. (Russian) **51** #1089
Laptev, G. I. On the Cauchy problem for linear partial differential systems of the second order with constant coefficients. **46** #2208
Liess, Otto Operators with maximal Cauchy problem. **47** #9035
The Cauchy problem for operators in two variables. II. **51** #10845
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Melrose, Richard B. The Cauchy problem with polynomial growth conditions for partial differential operators with constant coefficients. **51** #8606
Nagumo, Mitio *See* **Furuya, Hitoshi**, **56** #12549
Nishiwada, Kimimasa Singular supports of solutions of partial differential equations in a slab domain. **52** #8637
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Persson, Jan The Fourier transform on $L^1_{\rm loc}$ and its application to Cauchy problems for linear partial differential equations. **46** #503
Non-uniqueness of Täcklind type in the characteristic Cauchy problem. **51** #3668
Uniqueness classes of the characteristic Cauchy problem for equations with constant coefficients. **51** #3669
Suveika, I. V. The representation of the solution of the Cauchy problem for I. G. Petrovskiĭ well-posedequations with constant coefficients in the case of one space

variable. (Russian) **53** #6073

Wakita, Masu Non-well posedness of the Cauchy problem for a partial differential operator with constant coefficients. **56** #6083

Yamada, Haruki On admissible data of Cauchy problem for second order equations with constant coefficients. **56** #829

Remarks on admissible data for Cauchy problem. **57** #6789

Zerner, Martin Domaines d'holomorphie des fonctions vérifiant une équation aux dérivées partielles. **55** #5995

Secondary classifications:

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(*with* Bott, Raoul; Gårding, L.) Lacunas for hyperbolic differential operators with constant coefficients. I. (Russian) (**58** #29313)

(*with* Bott, Raoul; Gårding, L.) Lacunas for hyperbolic differential operators with constant coefficients. II. (**57** #10252b)

Bott, Raoul *See* **Atiyah, M. F.; et al.**, (**57** #10252a); **Atiyah, M. F.; et al.**, (**57** #10252b) *and* **Atiyah, M. F.; et al.**, (**58** #29313)

(Egorov, Ju. V.) *See* **Atiyah, M. F.; et al.**, (**58** #29313)

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Tsuji, Mikio Propagation of the singularities for hyperbolic equations with constant coefficients. (**57** #3653)

Watanabe, Kinji On the uniqueness of the Cauchy problem for certain elliptic equations with triple characteristics. (**46** #7698)

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Andersson, Karl Gustav Propagation of analyticity of solutions of partial differential equations with constant coefficients. **45** #8986

Global solvability of partial differential equations in the space of real analytic functions. **52** #11292

Antypko, I. I. The boundary value problem in an infinite layer for systems of linear partial differential equations. (Russian) **45** #3922

Avantaggiati, Antonio Sistemi di equazioni a derivate parziali a coefficienti costanti in due variabili e problemi ellittici. **54** #13286

Bagby, Thomas (*with* Brennan, James E.) Bounded evaluations for linear elliptic differential operators. **47** #7202

Bassotti, Lucilla Sottospazi invarianti per operatori differenziali lineari a coefficienti costanti. (English summary) **51** #1090

Bedford, Eric (*with* Kawai, Takahiro) Local extension of solutions of systems of linear differential equations with constant coefficients. **58** #29122

Bengel, Gunter Sur le prolongement analytique des solutions d'une équation aux dérivées partielles. **45** #3923

Berkinov, H. B. Solution of certain systems of partial differential equations with commuting linear differential operators. (Russian. Uzbek summary) **47** #5422

Bolley, Pierre (*with* Camus, Jacques) Régularité pour des systèmes à coefficients constants. (English summary) **55** #8532

Borok, V. M. (*with* Žitomirs'kiĭ, Ja. Ī.) The uniqueness of the solution of boundary value problems in infinite cylindrical domains. (Russian) **52** #14584

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Cattabriga, Lamberto Sulle soluzioni in tutto lo spazio di certe equazioni a derivate parziali. (English summary) **45** #8987

Cavallucci, Angelo Qualche osservazione sulle equazioni a derivate parziali a coefficienti costanti omogenee in R^n. (English summary) **49** #7580

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Chakrabarti, Aloknath A note on non-separable solutions of linear partial differential equations. **48** #2546

Chrastina, Jan Boundary value problems for linear partial differential equation with constant coefficients. Homogeneous equation in the half plane. **55** #833

Boundary value problems for linear partial differential equation with constant coefficients non-homogeneous equation in the half-plane. (Czech and loose Russian summaries) **58** #17475

Cohoon, D. K. Nonexistence of a continuous right inverse for surjective linear partial differential operators on certain locally convex spaces. **50** #7778

Costabile, Francesco Sull'esistenza di soluzioni olomorfe in C^n di equazioni a derivate parziali a coefficienti costanti con opportuno termine noto olomorfo. (English summary) **49** #5542

De Giorgi, Ennio Sur l'existence de solutions analytiques d'équations à coefficients constants. **50** #7779

Solutions analytiques des équations aux dérivées partielles à coefficients constants. **53** #997

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Frank, Ludvík Solution of partial differential equations by the method of increasing their order. (Czech. English and Russian summaries) **52** #3711

Gårding, L. Local hyperbolicity. **48** #2547

Gel'man, I. V. (*with* Maz'ja, V. G.) Estimates on the boundary for differential operators with constant coefficients in a half-space. (Russian) **50** #5164

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Gromov, V. P. A certain class of functional equations. (Russian) **45** #7251

Gruman, Lawrence Opérateurs différentiels d'ordre infini dans des espaces de fonctions entières. **58** #1552

Hainzl, Josef Zur Gruppeninvarianz linearer partieller Differentialgleichungen m konstanten Koeffizienten. **52** #6163

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Lower bounds at infinity for solutions of differential equations with c coefficients. **49** #5543

Janušauskas, Algimantas A certain first order system. (Russian) **48** #6641

Kaneko, Akira Fundamental principle and extension of solutions of linear diff equations with constant coefficients. **58** #1553

On estimating the singular spectrum of the boundary values of real a solutions to linear partial differential equations with constant coefficients. (Ja **58** #17476

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Kasimov, F. A. A general complex representation of the regular solutions of a class of partial differential equations. (Russian. Azerbaijani summary) **45** #5

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Kawai, Takahiro On the theory of Fourier hyperfunctions and its applications to differential equations with constant coefficients. **45** #7252

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Kleinerman, Sergiu (*with* Liess, Otto) Uniqueness theorems in the Goursat probl constant coefficient partial differential operators. **55** #10818

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Komeč, A. I. Elliptic differential equations with constant coefficients in a cone. (R English summary) **49** #7581

Leontovič, V. M. Energy inequalities for general systems of linear partial diffe equations. (Russian. English summary) **48** #693

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Louhivaara, Ilppo Simo (*with* Simader, Christian G.) Über nichtelliptische lineare partielle Differentialoperatoren mit konstanten Koeffizienten. **48** #9075

Matarasso, Silvano Formule di maggiorazione relative ad una classe di equaz coefficienti costanti. (English summary) **58** #22992

Maz'ja, V. G. (*with* Gel'man, I. V.) Estimates for differential operators with co coefficients in a half-space. (Russian) **58** #22993

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Merzon, A. E. The solvability of differential equations with constant coefficient cone. (Russian) **50** #5165

Murata, Minoru A theorem of Liouville type for partial differential equation constant coefficients. **51** #8607

Pavlov, A. L. General boundary value problems for partial differential equation constant coefficients in a half-space. (Russian) **58** #29123

General boundary value problems for differential equations with constant coefficients in a half-space. (Russian) **57** #3600

Pehkonen, Erkki Über die linearen partiellen quasielliptischen Differentialoper mit konstanten Koeffizienten. **58** #1554

Perel'man, M. A. The boundary value problem in an infinite layer. (Russian) **53**

Persson, Jan On the extreme singular supports of solutions of linear partial diffe equations with constant coefficients. **57** #16942

Piccinini, Livio C. Non surjectivity of the Cauchy-Riemann operator on the space analytic functions on $\mathbf{R}^n$. Generalizations to the parabolic operators. (Italian summary) **48** #4480

Non-surjectivity of $(\partial^2/\partial x^2)+(\partial^2/\partial y^2)$ as an operator on the space of a functions on $\mathbf{R}^3$. **55** #8533

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Shimada, Yoshio On the existence of solutions for system of linear partial diffe equations with constant coefficients. **46** #2209

Simader, Christian G. *See* **Louhivaara, Ilppo Simo**, **48** #9075

Suleĭmanov, N. M. Well-posed boundary value problems in the quarter plane infinite system of partial differential equations in generalized functions. (R **55** #3507

Unterberger, André Opérateurs différentiels homogènes sur $\mathbf{R}^3$. **45** #7255

Vilenc', Ī. L. Unique solution classes of the general boundary value problem in for systems of linear partial differential equations. (Ukrainian. English and R summaries) **49** #3304

Weinstock, Barnet M. Uniform approximation by solutions of elliptic equations. **49** #5544

Zarnickaja, N. V. (*with* Selezn'ova, F. G.; Èĭdel'man, S. D.) A mixed problem fo Petrovskiĭ well-posed systems of equations with constant coefficients in a quarter-space. (Russian) **49** #818

Zerner, Martin Sur les perturbations analytiques. **52** #11293

Žitomirs'kiĭ, Ja. Ī. *See* **Borok, V. M.**, **52** #14584

Zuily, Claude Sur l'existence de solutions analytiques globales des équations aux dérivées partielles linéaires à coefficients constants en deux variables indépen d'après I. De Giorgi. **53** #999

Secondary classifications:

Andersson, Karl Gustav ★Singularities of solutions of linear partial differential equations. (**50** #7764)

Antypko, I. I. (*with* Perel'man, M. A.) Unique solution classes of a nonlocal multipoint boundary value problem in an infinite layer. (Russian) (**49** #7565)

Artino, Ralph A. Gevrey classes and hypoelliptic boundary value problems. (**54** #5609)

Baouendi, M. S. Solvability of partial differential equations in the traces of analytic solutions of the heat equation. (**58** #1564)

Bassotti, Lucilla Sulle decomposizioni di alcuni spazi funzionali in somma diretta di sottospazi mutuamente ortogonali. (English summary) (**52** #1288)

Cattabriga, Lamberto *See* **De Giorgi, Ennio**, (**52** #3702)

Cohoon, D. K. Nonexistence of a continuous right inverse for linear partial differential operators with constant coefficients. (**47** #5659)

De Giorgi, Ennio (*with* Cattabriga, Lamberto) Una dimostrazione diretta dell'esistenza di soluzioni analitiche nel piano reale di equazioni a derivate parziali a coefficienti costanti. (English summary) (**52** #3702)

Èskin, M. I. Boundary value problems for an overdetermined system of two equations in a smooth domain. (Russian) (**54** #3181)

Fedorjuk, M. V. *See* **Gindikin, S. G.**, (**58** #29140)

Gel'man, I. V. (*with* Maz'ja, V. G.) Estimates for differential operators with constant coefficients in a half space. (Russian) (**45** #974)

(*with* Maz'ja, V. G.) The domination of differential operators with constant coefficients in a half-space. (Russian) (**53** #6076)

Gindikin, S. G. Energy estimates connected with the Newton polyhedron. (Russian) (**52** #3713)

(*with* Fedorjuk, M. V.) Asymptotic behavior of the Green function of well-posed hypoelliptic differential operators in the sense of Petrovskiĭ with constant coefficients. (Russian) (**58** #29140)

Gudovič, I. S. (*with* Kreĭn, S. G.) Boundary value problems for overdetermined systems of partial differential equations. (Russian. Lithuanian and English summaries) (**58** #1720)

Kim, Jongsik *See* **Pak, Eulyong**, (**51** #1387)

Kiselman, Christer O. Supports des fonctionnelles sur un espace de solutions d'une équation aux dérivées partielles à coefficients constants. (**51** #8814)

Kleiza, Jonas Approximation of the solutions of a homogeneous system of differential equations. (Russian. Lithuanian and English summaries) (**50** #10504)

Komatsu, Hikosaburo Hyperfunctions and linear partial differential equations. (**58** #2261)

Kreĭn, S. G. (*with* Savčenko, Ju. B.) Exponential dichotomy for partial differential equations. (Russian) (**46** #3941)

See also **Gudovič, I. S.**, (**58** #1720)

Malgrange, Bernard Ouverts concaves et théorèmes de dualité pour les systèmes différentiels à coefficients constants. (**46** #3516)

Maz'ja, V. G. *See* **Gel'man, I. V.**, (**45** #974) *and* **Gel'man, I. V.**, (**53** #6076)

Pak, Eulyong (*with* Kim, Jongsik) Distributions and P.D.E. I. (**51** #1387)

Perel'man, M. A. *See* **Antypko, I. I.**, (**49** #7565)

Roth, B. Finitely generated submodules of differentiable functions. II. (**46** #9706)

Rüssmann, Helmut On optimal estimates for the solutions of linear partial differential equations of first order with constant coefficients on the torus. (**57** #7675)

Savčenko, Ju. B. *See* **Kreĭn, S. G.**, (**46** #3941)

Schapira, Pierre Équations aux dérivées partielles dans l'espace des hyperfonctions. (**51** #8815)

Unterberger, André Espaces de Sobolev d'ordre variable et applications. (**52** #14984)

Uspenskiĭ, S. V. General boundary value problems for a class of nonclassical equations. (Russian) (**58** #29127)

Wildenhain, Günther Über Distributionen endlicher Ordnung. II. Eine Bemerkung zu einer Arbeit von M. S. Agranowitsch über lineare Differentialgleichungen mit konstanten Koeffizienten. (**58** #23580b)

Zieleźny, Z. On the functional dimension of the space of solutions of partial differential equations. (**52** #986)

35Fxx General first order equations and systems

Secondary classifications:

Arthurs, A. M. Variational formulation of Hamiltonian boundary value problems. (**56** #16509)

35F05 Linear equations and systems, general

Akamatsu, Toyohiro On a parametrix in some weak sense of a first order linear partial differential operator with two independent variables. **54** #7998

Aliev, F. S. First order partial differential equations in generalized functions. (Russian. Azerbaijani and English summaries) **56** #6084

Baouendi, M. S. (*with* Goulaouic, C.) Sur une classe de problèmes de Cauchy singuliers non linéaires. **51** #3670

Bellman, Richard Time dependent scattering processes and invariant imbedding. **47** #7203

Čerkasov, I. D. Tensor conditions for the reducibility of elliptic and hyperbolic equations. (Russian) **46** #3970

Dezin, A. A. Natural differential operators and the separation of variables. (Russian) **48** #6642

Džuraev, A. A certain method for the study of systems of first order equations in three-dimensional space. (Russian) **52** #8638

(*with* Muhamadiev, È. M.) Normal solvability and the index of first order systems of composite type. (Russian) **56** #12550

Froim, V. H. A system of equations that are degenerate on the plane. (Russian) **58** #6650

Goldschmidt, Bernd Lösung des 1. Cousinschen Problems für Vekuasche Differentialgleichungen. **51** #10846

Goulaouic, C. *See* **Baouendi, M. S.**, **51** #3670

Hile, Gerald N. (*with* Protter, Murray H.) Unique continuation and the Cauchy problem for first order systems of partial differential equations. **58** #1555

Hoel, Carlton A note on local solvability. **50** #13856

Kaplan, Wilfred On partial differential equations of first order. **51** #10847

Kratz, Werner Zur Unlösbarkeit linearer partieller Differentialgleichungen. **49** #11023

Lewy, H. On analyticity in homogeneous first order partial differential equations. **55** #3508

Muhamadiev, È. M. *See* **Džuraev, A.**, **56** #12550

Nakaoka, Akira On uniqueness of analytic solution for first order partial differential equations with degenerate principal symbols. **51** #10848

Ninomiya, Haruki Some remarks on the existence of independent solutions for homogeneous first order differential system. **50** #748

Padovan, Joseph On solutions to multiply-connected nonself-adjoint systems subject to deterministic and nondeterministic excitations. **57** #13145

Peyser, Gideon Symmetric positive systems in corner domains. **51** #8608

Picone, Mauro Su un teorema della teoria delle equazioni lineari a derivate parziali del primo ordine. (English summary) **51** #3671

Sull'esistenza dell'unica soluzione di una certa equazione lineare a derivate parziali del primo ordine. (English summary) **51** #3672

Protter, Murray H. *See* **Hile, Gerald N.**, **58** #1555

Shapiro, Victor L. Removable sets for pointwise solutions of the generalized Cauchy-Riemann equations. **55** #10819

Taranov, N. A. (*with* Umbetžanov, D. U.) A certain system of partial differential equations, all with the same principal part. (Russian. Kazakh summary) **52** #980

Taylor, Michael E. Reflection of singularities of solutions to systems of differential equations. **58** #22994

Treves, F. Solution of Cauchy problems modulo flat functions. **58** #1556

Noyaux élémentaires d'équations aux derivées partielles du premier ordre. **58** #1557

Umbetžanov, D. U. *See* **Taranov, N. A.**, **52** #980

Valēēv, Kim G. A certain theorem of Ljapunov. (Russian) **45** #7247

Vidic, Christian Über zusammengesetzte Systeme partieller linearer Differentialgleichungen erster Ordnung. **51** #8609

Yee, Kane S. Explicit solutions for the initial boundary value problem of a system of lossless transmission lines. **47** #7204

Žilenko, S. V. The asymptotic splitting of a certain system of linear partial differential equations. (Russian. Kazakh summary) **54** #5606

Secondary classifications:

Berhin, P. E. A selfadjoint boundary value problem for the system ${}^*du+\lambda u=f$. (Russian) (**52** #12007)

Buffet, Jean-Philippe (*with* Lor, Jean-Cluade) Équations aux dérivées partielles linéaires du premier ordre avec singularités isolées. (English summary) (**55** #9149)

Duistermaat, J. J. On first order elliptic equations for sections of complex line bundles. (**51** #3718)

Höppner, Wolfgang Über n-dimensionale Verallgemeinerungen der Beltramischen Differentialgleichung und die Struktur ihrer Lösungsmengen. (**52** #15303)

Kajiwara, Joji (*with* Môri, Yasuko) On the existence of global holomorphic solutions of differential equations with complex parameters. (**50** #11330)

Koohara, Akira Similarity principle of the generalized Cauchy-Riemann equations for several complex variables. (**51** #10668)

Lor, Jean-Cluade *See* **Buffet, Jean-Philippe**, (**55** #9149)

Môri, Yasuko *See* **Kajiwara, Joji**, (**50** #11330)

Šugrin, S. M. Strong and weak extension of differential operators. (Russian) (**54** #3143)

Taiani, Geraldine Non-existence of solutions to the Cauchy problem for first order partial differential equations. (**54** #7992)

Treves, F. Integral representation of solutions of first-order linear partial differential equations. I. (**53** #3478)

Tutschke, W. Globale Konstruktion von Stammfunktionen im verallgemeinerten Sinn zu komplexwertigen Funktionen. (**47** #2037)

Über eine Axiomatik der Zurückführung des additiven Cousin-Problems auf die inhomogene Differentialgleichung mit einer Anwendung auf die Vekuasche Differentialgleichung. (Polish summary) (**56** #8891)

35F10 Initial value problems for linear equations and systems

Cazzani Nieri, Maria Grazia Un teorema di esistenza della soluzione del problema di Cauchy nella classe delle funzioni assolutamente continue nelle singole variabili. **57** #3601

Čekmarev, T. V. The Cauchy and Goursat problems for a system of equations of plane homogeneous flows. (Russian) **56** #6085

Ivanov, N. A. The Cauchy problem for almost linear first order partial differential equations. (Russian) (See RŽMat **1973** #1 B235)

Lapkovs'kiĭ, A. K. *See* **Laptins'kiĭ, V. M.**, **50** #10521

Laptins'kiĭ, V. M. (*with* Lapkovs'kiĭ, A. K.) The structure of the solution of the Cauchy problem for a linear differential system on a manifold. (Russian) **50** #10521

Miyake, Masatake On the initial-value problems with data on a characteristic surface for linear systems of first order equations. **47** #3814

Nakaoka, Akira Uniqueness of the solution of some characteristic Cauchy problems for first order systems. **54** #7999

On uniqueness in some characteristic Cauchy problem for first order systems. **49** #11024

Strauss, Monty J. (*with* Treves, F.) First-order linear PDEs and uniqueness in the Cauchy problem. **48** #9076

Treves, F. *See* **Strauss, Monty J.**, **48** #9076

Secondary classifications:

Krantz, Steven G. Structure and interpolation theorems for certain Lipschitz spaces and estimates for the ∂ equation. (**55** #3316)

Kučerenko, V. V. The Hamilton-Jacobi equation in a complex nonanalytic situation.

(Russian) (52 #6795)

Maslov's canonical operator on the germ of a complex almost analytic manifold. (Russian) (52 #6796)

Strauss, Martin (*with* Treves, F.) Uniqueness in the Cauchy problem for first-order linear partial differential operators. (58 #29046)

Suzuki, Humio The existence in the large of analytic solutions of first order linear partial differential equations, and their applications. (Japanese) (58 #2908)

Treves, F. *See* **Strauss, Martin,** (58 #29046)

35F15 Boundary value problems for linear equations and systems

Benachour, Saïd Solutions d'une classe de systèmes symétriques. **58** #6651

Džuraev, A. A boundary value problem for a certain system of first order equations in three-dimensional space. (Russian) **53** #13811

Meden, Horst Über die eindeutige Zuordnung der Lösungen partieller komplexer Differentialgleichungen und der holomorphen Funktionen bei Existenzbeweisen mittels des Schauderschen Fixpunktsatzes. **51** #10849

Namazov, V. M. A necessary condition for the solvability of a mixed problem for a first order Kovalevskaja system. (Russian. Azerbaijani summary) **56** #6086

Orlov, Konstantin Example of solving of the boundary value problems for one partial differential equation with two unknown functions. **58** #29124

Samoĭlenko, I. S. (*with* Ševčenko, V. Ī.) The Riemann-Hilbert problem for a holomorphic vector with pseudodifferential boundary conditions. (Russian) **48** #9077

Boundary value problems for M. Z. Solomjak's system. (Russian) **56** #12551

Ševčenko, V. Ī. *See* **Samoĭlenko, I. S.,** **48** #9077

Tartakoff, David S. Regularity of solutions to boundary value problems for first order systems. **55** #13061

Secondary classifications:

Bedford, Eric (*with* Taylor, B. Alan) The Dirichlet problem for a complex Monge-Ampere equation. (**52** #14383)

Hill, C. Denson (*with* MacKichan, Barry) Hyperfunction cohomology classes and their boundary values. (**57** #7698)

MacKichan, Barry *See* **Hill, C. Denson,** (**57** #7698)

Popivanov, Nedju Iv. Coincidence of the weak and the strong solution of boundary value problems for first order linear systems. (Russian) (**54** #10824)

Safarov, D. H. Boundary value problems for a system of equations of composite type in three-dimensional domains. (Russian. Tajiki summary) (**58** #1716)

Saks, R. S. Boundary value problems for certain systems that are reducible to elliptic systems. (Russian) (**49** #9880)

Boundary value problems for certain systems that can be reduced to elliptic systems. (Russian) (**49** #9881)

Taylor, B. Alan *See* **Bedford, Eric,** (**52** #14383)

Vansnick, Jean-Claude Sur un théorème de Lichtenstein. (**46** #6386)

35F20 Nonlinear equations and systems, general

Adamus, A. On integrable bounds for differential equations. **46** #504

Aizawa, Sadakazu On the uniqueness of global generalized solutions for the equations $F(x,u,\mathrm{grad}u)=0$. **51** #10850

Andrejanov, P. A. The Cauchy problem for a first order quasilinear equation in the class of locally integrable functions. (Russian. English summary) **45** #3918

Ballou, Donald P. Weak solutions with a dense set of discontinuities. **54** #5607

Benton, Stanley H., Jr. A general space-time boundary value problem for the Hamilton-Jacobi equation. **45** #7248

Byhovskiĭ, È. B. An initial-boundary value problem for the equation $u_t + a_x(u) = 0$. (Russian) **45** #2306

A boundary value problem for a first order quasilinear equation when the directions of the characteristics on the boundary depend arbitrarily on the unknown function. (Russian) **57** #6790

Čuev, M. A. The Hamilton-Jacobi method, and the problem of integrating ordinary differential equations. (Russian) **56** #16126

Delgado, V. Global solutions of the Cauchy problem for the (classical) coupled Maxwell-Dirac and other nonlinear Dirac equations in one space dimension. **57** #3602

Fisher, Brian Complete integrals of partial differential equations. **57** #6791

Furioli Martinolli, Antonella Su un problema singolare di Darboux per l'equazione $xys = xAp + yBq + Cz + xyf$. **45** #2307

Hahn-Goldberg, Saúl Generalized linear and quasilinear accretive systems of partial differential equations. **58** #17477

Harita, Mitsuru On the unique existence of global holomorphic solutions of some partial differential equations with a parameter in a Stein manifold. **52** #14587

Janušauskas, Algimantas A certain nonlinear system of first order differential equations. (Russian) **53** #13812

Kečkić, Jovan D. On nonlinear superposition. **47** #7205

Levin, Simon A. On the equivalence of quasilinear first-order equations and a class of functional equations. **57** #850

Meden, Horst Eine Verallgemeinerung des Reziprozitätstheormes für Lösungen auch nichtlinearer partieller komplexer Differentialgleichungen. **51** #3673

Raspopov, V. E. A form of differential connections that are compatible with systems of quasilinear equations. (Russian) **58** #29125

Sidorenko, A. D. A theorem on the impossibility of a gradient catastrophe for a certain class of multidimensional systems of quasilinear equations. (Russian) **50** #13857

Taranov, N. A. *See* **Umbetžanov, D. U.,** **47** #622

Thielcke, Helmut Einschliessung der Lösungen von Differentialgleichungssystemen. **53** #11206

Tutschke, W. Lösungen partieller komplexer Differentialgleichungen in mehreren komplexen Variablen mit vorgeschriebenem Hauptteil. **50** #13858

Topologische Abschätzungsmethoden für Lösungen partieller komplexer Differentialgleichungen. **52** #11294

Über die Untersuchung von Problemen der optimalen Steuerung in d mittels komplexer Methoden (Pontrjaginsches Maximumprinzip für partielle Differentialgleichungen). **52** #11295

Lösung nichtlinearer partieller Differentialgleichungssysteme erster Or der Ebene durch Verwendung einer komplexen Normalform. **55** #834

Solutions of nonlinear complex partial differential equations that have p discontinuities along a given curve. (Russian. Armenian and English su **56** #9057

Umbetžanov, D. U. (*with* Taranov, N. A.) On the question of the reducibi certain system of partial differential equations with identical right hand side. (Russian. Kazakh summary) **47** #622

Secondary classifications:

Andrejanov, P. A. The stability of the solutions of the Cauchy problem for fi quasilinear equations. (Russian) (**51** #3661)

Benecke, Klaus Kompakte Mengen komplexwertiger Funktionen. (**58** #6254)

Benton, Stanley H., Jr. ★The Hamilton-Jacobi equation. (**56** #813)

Bollermann, W. Zur Anwendung der kanonischen Störungstheorie auf beliebige von expliziten Differentialgleichungen. (**57** #18315)

Brézis, Haïm (*with* Nirenberg, L.) Some first-order nonlinear equations on (**56** #3896)

Crandall, Michael G. Semigroups of nonlinear transformations and evolution eq (**54** #8367)

Curteanu, Adina Invariance groups of a Cauchy system. (**58** #1508)

Diomeda, Lorenza Sui sistemi, non lineari, di Cauchy-Riemann generalizzati. summary) (**58** #1226)

Friedrichs, Kurt O. Conservation equations and the laws of motion in classical (**58** #23116)

Gorbatenko, E. M. Germs of Pfaffian manifolds. (Russian) (**50** #8586)

Kilp, H. On the geometry of a system of three first order partial differential eq (Russian. Estonian and English summaries) (**51** #14132)

Klink, Helge-K. Eine Feinabschätzung des Doppelintegrals mit Cauchy-Singulari deren Anwendung auf die Methode der sukzessiven Approximation bei pa komplexen Differentialgleichungen. (**57** #6447)

Lyčagin, V. V. Local classification of first order nonlinear partial differential equ (Russian) (**54** #8691)

Nirenberg, L. *See* **Brézis, Haïm,** (**56** #3896)

Tutschke, W. A new application of I. N. Vekua's proof for Carleman's th (Russian) (**50** #7551)

Über die Anwendung der Mayerschen Transformation in der Theorie pa komplexer Differentialgleichungen. (**52** #6152)

35F25 Initial value problems for nonlinear equations and systems

Adamus-Kulczycka, A. Global existence for non-linear partial differential equati the first order. **48** #6643

Aizawa, Sadakazu A semigroup treatment of the Hamilton-Jacobi equation in one variable. **49** #11025

A semigroup treatment of the Hamilton-Jacobi equation in several space variables. **52** #14588

Andrejanov, P. A. *See* **Kružkov, S. N.,** **52** #981

Baouendi, M. S. (*with* Goulaouic, C.) Problèmes de Cauchy singuliers non lin **53** #3482

Dafermos, Constantine M. Polygonal approximations of solutions of the initial problem for a conservation law. **46** #2210

Friedman, Avner The Cauchy problem for first order partial differential equ **48** #4481

Fursikov, A. V. Formulas for certain functionals of the smooth solutions of a c systems of quasilinear equations. (Russian) **54** #13287

Goulaouic, C. *See* **Baouendi, M. S.,** **53** #3482

Hil'debrand, F. The first boundary value problem "in the large" for a first quasilinear equation. (Russian) **52** #982

Kružkov, S. N. (*with* Andrejanov, P. A.) On the nonlocal theory of the Cauchy pr for quasilinear first order equations in the class of locally summable fun (Russian) **52** #981

Kuznecov, N. N. Stable methods for the solution of a first order quasilinear equati class of discontinuous functions. (Russian) **56** #3448

Pliś, Andrzej Global existence theorems for a partial differential equation of th order. **55** #8534

Tamburro, Michael B. The evolution operator solution of the Cauchy problem Hamilton-Jacobi equation. **56** #6087

Treves, F. Solution of Cauchy problems modulo flat functions. **53** #13813

Tutschke, W. Das charakteristische Problem für pseudoholomorphe Funktionens mehrerer komplexer Variabler, die Lösungen vollständiger (auch nichtlinearer) komplexer Differentialgleichungssysteme sind. **46** #3971

Secondary classifications:

Baiada, Emilio (*with* Tripiciano, Giulia) Calcolo dell'errore per un tipo di sol approssimata di un'equazione differenziale alle derivate parziali del primo (**53** #14947)

Baouendi, M. S. (*with* Goulaouic, C.) Singular nonlinear Cauchy problems. (**55**

Goulaouic, C. *See* **Baouendi, M. S.,** (**55** #8523)

Jacobowitz, Howard Deformations leaving a hypersurface fixed. (**49** #3702)

Ljapidevskiĭ, V. Ju. The correctness of the Cauchy problem in the large for no hyperbolic systems. (Russian) (**57** #904)

Moreau, Jean-Jacques Approximation en graphe d'une évolution discontinue. (summary) (**57** #13332)

Ôharu, Shinnosuke (*with* Takahashi, Todayosu) A convergence theorem of nonlinear semigroups and its application to first order quasilinear equations. (**49** #5966)

le Roux, Alain Yves On the convergence of the Godounov's scheme for first order quasi linear equations. (**55** #11633)

A numerical conception of entropy for quasi-linear equations. (**57** #18128)

Takahashi, Todayosu *See* **Ôharu, Shinnosuke**, (**49** #5966)

Tripiciano, Giulia *See* **Baiada, Emilio**, (**53** #14947)

35F30 Boundary value problems for nonlinear equations and systems

Barbu, Viorel Nonlinear boundary-value problems for a class of hyperbolic systems. **57** #16943

Benton, Stanley H., Jr. Global variational solutions of Hamilton-Jacobi boundary value problems. **53** #6074

Biroli, Marco Sur un lemme de convergence et ses applications aux équations aux dérivées partielles d'évolution non linéaires et non monotones. I, II. (Italian summary) **53** #6075

Burch, B. C. (*with* Goldstein, Jerome A.) Some boundary value problems for the Hamilton-Jacobi equation. **58** #1558

Byhovskiĭ, È. B. A global boundary value problem for a first order quasilinear differential equation. (Russian) **51** #1091

Genov, Angel (*with* Šopolov, Nikolaĭ) Generalized solutions for the second boundary value problem for certain first order nonlinear differential equations. (Bulgarian. Russian and French summaries) **46** #2212

Goldstein, Jerome A. *See* **Burch, B. C.**, **58** #1558

Hazāns, M. The global existence of a continuous solution of an initial-boundary value problem for a quasilinear first order equation. (Russian) **51** #1092

Konovalov, A. N. On the question of the numerical solution of multidimensional problems on filtration of a two-phase incompressible fluid. (Russian) **46** #505

Liu, Tai-Ping Initial-boundary value problems for gas dynamics. **55** #5996

Meden, Horst Über die eindeutige Bestimmtheit von Lösungen partieller komplexer Differentialgleichungssysteme. **56** #830

Ponomarev, V. D. The local uniqueness of the solution of boundary value problems. (Russian) **51** #6117

Porru, Giovanni Su un problema di Darboux in grande per un sistema non lineare alle derivate parziali. **49** #7582

le Roux, Alain Yves Étude du problème mixte pour une équation quasi-linéaire du premier ordre. (English summary) **56** #831

Šopolov, Nikolaĭ Generalized solutions of first order nonlinear equations. (Bulgarian. Russian and French summaries) **46** #2211

See also **Genov, Angel**, **46** #2212

Tomita, Yoshihito A semigroup treatment of the mixed problem for the Hamilton-Jacobi equation in one space variable. **55** #3509

Secondary classifications:

Elliott, Robert J. Boundary value problems for non-linear partial differential equations. (**57** #9096)

(*with* Kalton, Nigel J.) Boundary value problems for nonlinear partial differential operators. (**52** #16679)

Kalton, Nigel J. *See* **Elliott, Robert J.**, (**52** #16679)

35F99 None of the above, but in this section

Froim, V. H. Some partial differential equations that are degenerate on a hyperplane. (Russian) **57** #6792

Homa, G. P. (*with* Jacjuk, V. T.) Truncation of a countable system of partial differential equations. (Russian) **46** #2213

Jacjuk, V. T. *See* **Homa, G. P.**, **46** #2213

Sznitko, Wanda Investigation of the existence of a solution of the generalized Hilbert problem for a system of arbitrary power. **56** #3449

Secondary classifications:

Bilčev, Svetoslav Ĭ. The linearity of systems of two first order partial differential equations. (Russian) (**50** #5865)

Blank, Ja. P. (*with* Nikolaenko, M. A.) On the geometry of Pfaffian and Monge manifolds. (Russian) (**58** #18172)

Duistermaat, J. J. On foliations induced by complex vectorfields. (**58** #13227)

Hile, Gerald N. Representations of solutions of a special class of first order systems. (**58** #17136)

Losonczi, László A note on first-order linear partial differential inequalities. (**58** #11842)

Ludwig, Klaus Lineare und nichtlineare Differentialgleichungen in Richtungsableitungen 1. Ordnung nach n stetigen, normierten Vektorfeldern $\mathfrak{a}_1(x, y), \cdots, \mathfrak{a}_n(x, y)$. (**57** #16934)

Nikolaenko, M. A. *See* **Blank, Ja. P.**, (**58** #18172)

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Garnir-Monjoie, F. S. Problèmes aux limites d'évolution dans un demi-espace pour les opérateurs matriciels de dérivation du premier ordre: recherche du projecteur spectral. **57** #16945

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Melrose, Richard B. (*with* Sjöstrand, Johannes) Singularities of boundary value problems. I. **58** #11859

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Ade, Hans Zur Existenz von Lösungen gewisser nichtlinearer elliptischer Randwertaufgaben. (**52** #11674)
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Cornille, Henri Generalization of the inversion equations and application to nonlinear partial differential equations. I. (**58** #12041a)
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Jarušek, Jiří (*with* Nečas, Jindřich) Sur les domaines des valeurs des opérateurs non-linéaires. (Loose Russian summary) (**58** #30555)
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Lax, Peter D. Nonlinear partial differential equations of evolution. (See Zbl **223** #35024; MR **54** #4)
Lyčagin, V. V. A local classification of first order nonlinear partial differential equations. (Russian) (**50** #1295)
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Bondarenko, B. A. Quasipolynomial solutions of the Cauchy-Nicolescu and the Ca problem for multilinear partial differential equations. (Russian) (**58** #22977)
Fridlender, V. R. (*with* Husnetdinov, M. Z.) A certain invariant of the Cauchy Goursat systems. (Russian) (**54** #13289)
Glassey, Robert T. On the blowing up of solutions to the Cauchy problem for nonl Schrödinger equations. (**57** #842)
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Ahmedov, Š. A. Analyticity with respect to part of the variables of the generalized solutions of systems of differential equations. (Russian) **46** #5818

Aramaki, Junichi Some remarks on local solvability and hypoellipticity of second-order abstract evolution equations. **53** #13815

Arcangéli, Rémi Existence de solutions d'équations hypo-elliptiques vérifiant des conditions ponctuelles. **45** #5566

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(*with* Goulaouic, C.; Lipkin, L. J.) On the operator $\Delta r^2 + \mu(\partial/\partial r)r + \lambda$. **48** #11748

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On regular hypoelliptic boundary problems. **47** #7206

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Croc, Elisabeth (*with* Dermenjian, Yves; Iftimie, Viorel) Une classe d'opérateurs pseudo-différentiels partiellement hypoelliptique-analytiques. (English summary) **55** #839

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(*with* Zuily, Claude) Régularité analytique et Gevrey d'opérateurs elliptiques dégénérés. **52** #11300

Dionne, Ph. A. Wave front sets and hypoelliptic operators. **53** #1002

Džalilov, K. A. The correct problem in a whole space for differential equations with splitting characteristic roots. (Russian. Azerbaijani and English summaries) **53** #6080

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Vaghi, Carla Unicità delle soluzioni limitate e comportamento asintotico delle soluzioni dell'equazione parabolica $Lz=f(x,t,z,p)$, con $f(x,t z,p)$ funzione discontinua. I, II. (English summaries) **46** #7709

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Zelenjak, T. I. The qualitative properties of the solutions of quasilinear mixed problems for equations of parabolic type. (Russian) **58** #6703

Žikov, V. V. The stabilization of the solutions of parabolic equations. (Russian) **57** #13190

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Aliev, G. G. The problem of finding the functions that occur in the boundary and supplementary conditions in the inverse problem for the heat equation on a semi-infinite region. (Russian. Azerbaijani summary) (**58** #12039)

Alimov, A. L. (*with* Buslaev, V. S.) A continual integral for a second order parabolic equation. (Russian. English summary) (**56** #6761)

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Azamatov, S. Ž. The Cauchy problem for an equation of parabolic type with shifted argument. (Russian) (**52** #1066)

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The determination of a coefficient in the lowest order term of a general parabolic equation. (Russian) (**58** #1774)

Brézis, Haïm (*with* Ekeland, Ivar) Un principe variationnel associé à certaines équations paraboliques. Le cas indépendant du temps. (English summary) (**58** #30592)

(*with* Ekeland, Ivar) Un principe variationnel associé à certaines équations paraboliques. Le cas dépendant du temps. (English summary) (**58** #30593)

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Integral operators and reflection principles for parabolic equations in one space variable. (**49** #3303)

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Ivanov, A. V. Local estimates of the maximum modulus of the first derivatives solutions of quasilinear nonuniformly elliptic and nonuniformly parabolic equ and of systems of general form. (Russian) (**45** #2318)

Ivočkina, N. M. (*with* Oskolkov, A. P.) Nonlocal estimates of the first derivatives solutions of the first boundary value problem for certain classes of nonunif elliptic and nonuniformly parabolic equations and systems. (Russian) (**45** #556

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Aliev, N. M. Solution by the generalized Fourier method of a mixed problem for a second order parabolic equation with retarded argument in an unbounded domain. (Russian) (**54** #13355)

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Babič, V. M. (*with* Rapoport, Ju. O.) Short-time asymptotic behavior of the fundamental solution of the Cauchy problem for a second order parabolic equation. (Russian) (**56** #6071)

Hayden, T. L. (*with* Massey, Frank J., III) Nonlinear holomorphic semigroups. (**52** #11678)

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Korsuns'kiĭ, L. M. (*with* Malyšev, I. G.) A certain integral representation of the solutions of the Cauchy problem for a parabolic equation with a variable coefficient. (Russian) (**47** #614)

Maĭboroda, Ī. M. A certain two-sided method for the solution of the first boundary value problem for second order parabolic systems of a particular form. (Russian) (**52** #7166)

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Marino, Mario Sulla regolarizzazione delle soluzioni deboli dei problemi al contorno per operatori parabolici. (**48** #6636)

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Romanov, V. G. A certain inverse problem for an equation of parabolic type. (Russian) (**57** #17046)

Rosen, Gerald Effects of diffusion on the stability of the equilibrium in multi-species ecological systems. (**58** #15314)

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(*with* Peletier, L. A.) Global stability of symmetric and asymmetric concentration profiles in catalyst particles. **50** #2698

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Verenič, Ī. Ī. (*with* Matiĭčuk, M. Ī.) The properties of the solutions of parabolic systems with a Bessel operator. (Russian) **58** #17520

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Cąkała, Sylwin Solution fondamentale spéciale de l'équation de la chaleur et son application à la construction de la solution fondamentale spéciale d'un système parabolique. (**53** #1022)

Chabrowski, Jan (*with* Reynaud, Gérard) Inéquations portant sur des systèmes linéaires de type parabolique et applications à la recherche de classes d'unicité. (**52** #8629)

(*with* Reynaud, Gérard) Propriétés de certaines solutions d'inégalité aux dérivées partielles de type parabolique. (**52** #8630)

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35K55 Nonlinear equations and systems

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Kalantarov, V. K. (*with* Ladyženskaja, O. A.) Formation of collapses in quasiline equations of parabolic and hyperbolic types. (Russian. English summary) **58** #292

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Nakao, Mitsuhiro Asymptotic stability of the bounded or almost periodic solution c wave equation with nonlinear dissipative term. (**55** #10811)
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Šišatskiĭ, S. P. A priori estimates in the problem of extending a wave field fro cylindrical time-like surface. (Russian) (**48** #11744)
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Verheggen, Th. M. M. (*with* Broer, L. J. F.; Sluijter, F. W.) Nonmonochromatic solutions of the spatially inhomogeneous wave equation based on the WKB approximation. (**58** #1538)
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Gasanov, K. K. The solution of the mixed problem for a hyperbolic equation two-dimensional time and Goursat initial conditions. (Russian. Azerbaijani summ **45** #8992

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Horošilova, V. I. Solution of problems of Bicadze-Samarskiĭ type for an equation of hyperbolic type in an unbounded domain. (Russian) **58** #29294

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Une caractérisation de l'hyperbolicité stricte. **46** #9539

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Lavenda, B. H. (*with* Peluso, G.; di Chiara, A.) Non-linear dissipative and dispersive waves. **56** #9083

Lenjuk, M. P. (*with* Šuh, L. O.) The *B*-wave equation. (Russian. English summary) **51** #3704

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Makowiecka, Irena Properties of the solutions of a certain hyperbolic equation. (Polish. Russian and English summaries) **56** #9084

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Morawetz, C. S. (*with* Strauss, Walter A.) Decay and scattering of solutions of a nonlinear relativistic wave equation. **46** #2239

Myjak, Józef Wenety *See* **DeBlasi, Francesco S.**, **55** #10860

Nadžafov, H. M. The first Cauchy-Goursat problem for a certain equation of hyperbolic type, degenerate on the boundary, with singular coefficients on the line of degeneracy. (Russian. Azerbaijani summary) **46** #529

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Paškovskiĭ, V. I. Connected operators and boundary value problems of hyperbolic and degenerate hyperbolic partial differential equations. (Russian) **51** #10879

Peluso, G. *See* **Lavenda, B. H.; et al.**, **56** #9083

Rauch, Jeffrey B. (*with* Taylor, Michael E.) Penetrations into shadow regions and unique continuation properties in hyperbolic mixed problems. **46** #2240

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Solution of the Goursat problem for a hyperbolic equation in the class of generalized solutions. (Russian) **58** #11948

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Saut, Jean-Claude Sur un problème hyperbolique non linéaire. **45** #716

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Kaĭstrenko, V. M. The Cauchy problem for a second order hyperbolic equation with data on a time-like surface. (Russian) **52** #1025

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určuladze, T. V. Plane mixed boundary value problems of the dynamics of an anisotropic elastic body. (Russian. Georgian summary) (**56** #17325)

oval'čik, Ī. M. A multiple continual integral in the space of continuous functions of two variables. (Ukrainian. English and Russian summaries) (**48** #6360)

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Guseĭnov, M. M. The solution of a one-dimensional mixed problem for a second order quasilinear hyperbolic equation in an infinite domain. (Russian. Azerbaijani

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The Darboux problem for a certain degenerate second order loaded integrodifferential equation. (Russian) (**54** #13508)
On the theory of boundary value problems for an equation of mixed hyperbolic-parabolic type. (Russian) (**57** #3635)
See also **Bicadze, A. V.**, (**46** #9538)
Nahuševa, F. B. *See* **Kumykova, S. K.**, (**57** #6855)
Nourrigat, Jean François Problèmes mixtes pour des systèmes hyperboliques singuliers. (**58** #23107)
Paskaleva, Nedelja (*with* Miluševa, S. D.) Numerical solution of the Tricomi problem for a certain equation of mixed type with discontinuous coefficients. (Bulgarian. Russian and German summaries) (**46** #6609)
Paškovskiĭ, V. I. Connected partial differential operators and boundary value problems. (Russian) (**47** #5425)
Sanginov, A. On a boundary value problem with a derivative for a system of three first order equations of composite type. (Russian. Tajiki summary) (**52** #11069)
Schincke, Erich Iterative Lösungen von Randwertproblemen partieller Differentialgleichungen vom zusammengesetzten Typ. (English and Russian summaries) (**58** #13809)
Smirnov, M. M. Functionally invariant solutions and the nonuniqueness of the solution of the Darboux problem for degenerate hyperbolic equations. (Russian) (**56** #878)
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Tersenov, S. A. Certain properties of the solutions of an equation of elliptic type on surfaces of degeneracy. (Russian) (**57** #6835)
Thelidze, M. G. A certain generalization of the Bicadze-Samarskiĭ problem. (Russian. Georgian and English summaries) (**52** #6184)
(**Trigubovič, L. V.**) *See* **All-Union Symposium: Selected Questions of Partial Differential Equations**, (**48** #680)
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Vaĭnbrand, G. I. A certain degenerate differential equation with discontinuous coefficients. (Russian) (**46** #5866)
Vasilevskiĭ, N. L. (*with* Karelīn, O. A.; Kerekeša, P. V.; Litvinčuk, G. S.) A class of singular integral equations with involution, and its applications to the theory of boundary value problems for partial differential equations. II. (Russian) (**58** #12245)
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35Nxx Overdetermined systems

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35N05 Constant coefficients

Bratti, Giuliano Caratterizzazione dei sistemi ipoellittici a coefficienti constanti, sovradeterminati, con il metodo della paramatrice. **52** #6206
Èskin, M. I. Boundary value problems for an overdetermined system of two equations in a smooth domain. (Russian) **54** #3181
Gudovič, I. S. (*with* Kreĭn, S. G.) Boundary value problems for overdetermined systems of partial differential equations. (Russian. Lithuanian and English summaries) **58** #1720
Komatsu, Hikosaburo Relative cohomology of sheaves of solutions of differential equations. **52** #14681
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Léger, Christian Les systèmes d'Asada à coefficients constants. **52** #11355
Malikov, H. M. An overdetermined system of linear partial differential equations with constant coefficients. (Russian) **48** #6716
Schubert, C. F. Overdetermined systems on $L^2(\mathbf{R}^+)$. **58** #1721
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Elliott, Robert J. Quasilinear resolutions of non-linear equations. (**50** #11335)
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Kaneko, Akira Representation of hyperfunctions by measures and some of its applications. (**49** #1103)
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Landucci, Mario Cauchy problem for $\bar\partial$-operator in strictly pseudoconvex doma (Italian summary) (**54** #5504)
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Rapp, Alain L'équation "$\bar\partial$" avec décroissance au bord sur certains ouverts conve d'un espace de Banach. (English summary) (**52** #11591)
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Sahaev, Š. Estimation of the solution of a certain overdetermined parabolic initial-boundary value problem. (Russian) (**56** #16174)
Saks, R. S. Boundary value problems for certain equations connected with the opera of exterior differentiation. (Russian) (**50** #8610)

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Alinhac, Serge Un opérateur différentiel dans R^3 au comportement surprenant (d'ap A. Andreotti et C. D. Hill). **52** #14682
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Hile, Gerald N. (*with* Protter, Murray H.) Properties of overdetermined first ord elliptic systems. **58** #11988
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Kondrat′ev, V. A. (*with* Èĭdel′man, S. D.) Nonnegative solutions of overdetermin systems of partial differential equations. (Russian) **57** #10265
Levin, Simon A. On the reduction of a first-order overdetermined system of part differential equations. **48** #726
Malikov, H. M. An over-determined system of pseudodifferential equations who symbols do not depend on the independent variables. (Russian. Tajiki summa **51** #10898
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Pallu de la Barrière, Philippe Existence et prolongement des solutions holomorphes équations aux dérivées partielles. **58** #17583
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Tutschke, W. Globale Konstruktion von Stammfunktionen im verallgemeinerten Sinn komplexwertigen Funktionen. **47** #2037
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35N15 $\bar\partial$-Neumann problem and generalizations; formal complexes [See also 58G05.]

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autov, Š. A. The forms that are orthogonal to holomorphic functions under integration over the boundary of strongly pseudoconvex domains. (Russian) **47** #3709

The forms that are orthogonal to the holomorphic functions, and related questions. (Russian) **47** #5460

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(*with* Tartakoff, David S.) Sur la régularité locale des solutions du problème de Neumann pour $\bar\partial$. **56** #12648

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Tangential Cauchy-Riemann complexes on spheres. **48** #11805

(*with* Stein, Elias M.) Parametrices and estimates for the $\bar\partial_b$ complex on strongly pseudoconvex boundaries. **49** #9438

(*with* Stein, Elias M.) Estimates for the $\bar\partial_b$ complex and analysis on the Heisenberg group. **51** #3719

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Propagation of singularities for $\bar\partial$. **52** #11358

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Cohomology vanishing theorems on intersections of strongly pseudoconvex domains. (**49** #7478)

Airault, Hélène Perturbations singulières et solutions stochastiques de problèmes de D. Neumann-Spencer. (**58** #18606)

Alt, Wolfgang Hölderabschätzungen für Ableitungen von Lösungen der Gleichung $\bar\partial u=f$ bei streng pseudokonvexem Rand. (English summary) (**50** #5023)

Andreotti, Aldo E. E. Levi convexity and H. Lewy problem. (**54** #13137)

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Boundary value problems and Mayer-Vietoris sequence. (Italian summary) (**54** #8753)

(*with* Hill, C. Denson; Łojasiewicz, Stanisław; MacKichan, Barry) Mayer-Vietoris sequences for complexes of differential operators. (**54** #8754)

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(*with* Nacinovich, Mauro) Some remarks on formal Poincaré lemma. (**57** #14064)

See also **Stormark, Olle**, (**57** #16694)

Badji, Chérif Le d''-problème de Neumann sur une variété kählérienne. (**54** #601a)

Variétés finies kählériennes et première classe de Chern. (**54** #601b)

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Bedford, Eric (*with* Federbush, Paul) Pluriharmonic boundary values. (**50** #13606)

Carlson, James A. (*with* Hill, C. Denson) On the maximum modulus principle for the tangential Cauchy-Riemann equations. (**50** #5011)

Cenkl, Bohumil (*with* Sorani, Giuliano) Sur l'opérateur $\delta\bar\delta$. (**50** #11328)

Cole, Brian (*with* Range, R. Michael) A-measures on complex manifolds and some applications. (**49** #5398)

Cowling, Michael G. Differential operators on nilpotent Lie groups. (**58** #13214)

Derridj, Makhlouf (*with* Tartakoff, David S.) On the global real analyticity of solutions to the $\bar\partial$-Neumann problem. (**54** #1312)

Diederich, Klas Über die 1. und 2. Ableitungen der Bergmanschen Kernfunktion und ihr Randverhalten. (**48** #6472)

Egorov, Ju. V. The subellipticity of the $\bar\partial$-Neumann problem. (Russian) (**56** #12317)

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Favilli, Franco Local boundary behavior of $\bar\partial$ on certain pseudo-convex domains in C^n. (Italian summary) (**52** #11116)

Federbush, Paul *See* **Bedford, Eric**, (**50** #13606)

Fischer, Wolfgang (*with* Lieb, Ingo) Lokale Kerne und beschränkte Lösungen für den $\bar\delta$-Operator auf q-konvexen Gebieten. (**49** #7477)

Folland, Gerald B. (*with* Kohn, Joseph J.) ★The Neumann problem for the Cauchy-Riemann complex. (**57** #1573)

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(*with* Stein, Elias M.) Parametrices and estimates for the $\bar\partial_b$ complex on strongly pseudoconvex boundaries. (**58** #24393)

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Gudovič, I. S. (*with* Kreĭn, S. G.) Elliptic boundary value problems for the system $\begin{pmatrix} d_1^* \\ d_0 \end{pmatrix} u=f$. (Russian) (**47** #7213)

Guillemin, V. Complexes of differential operators. (**54** #14007)

Henkin, G. M. Solutions with bounds for the equations of H. Lewy and Poincaré-Lelong. Construction of functions of Nevanlinna class with given zeros in a strongly pseudoconvex domain. (Russian) (**57** #6511)

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Kuranishi, Masatake Convexity conditions related with 1/2 estimate in boundary problems with simple characteristics/I. (49 #11575a)

Convexity conditions related with 1/2 estimate in boundary problems with simple characteristics. II. (49 #11575b)

On a generalization of $\bar\partial_b$. (48 #5125)

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Djuženkova, L. Ī. Analytic continuation across the continuous spectrum of the resolvent of certain differential operators. (Russian) (**49** #1167)

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Èskina, M. S. The scattering problem for partial difference equations. (Russian) (**50** #1030)

Faddeev, L. D. The inverse problem in the quantum theory of scattering. II. (Russian) (**58** #25585)

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Kitada, Hitoshi Scattering theory for Schrödinger operators with long-range potentials. I. Abstract theory. (**58** #30372a)

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Kondrat′ev, I. G. Scattering of electromagnetic waves by smooth perfectly reflecting objects that lie in an evenly inhomogeneous medium. (Russian. English summary) (**58** #14380)

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(*with* Phillips, Ralph S.) A logarithmic bound on the location of the poles of the scattering matrix. (**45** #5594)

(*with* Phillips, Ralph S.) On the scattering frequencies of the Laplace operator for exterior domains. (**45** #5531)

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(*with* Phillips, Ralph S.) An example of Huygens' principle. (**57** #6850)

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A new criterion for scattering theory. (**58** #7140)

Schmidt, E. J. P. Georg On scattering by time-dependent perturbations. (**52** #1360

Schulenberger, John R. (*with* Wilcox, Calvin H.) Completeness of the wave opera for scattering problems of classical physics. (**45** #4217)

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Weidmann, Joachim Trace class methods for scattering in a homogeneous electro-s field. (**58** #32418)

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Bareket, Miriam On the domain monotonicity of the first eigenvalue of a boun value problem. (German summary) **54** #3186

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Kasumov, R. K. Asymptotic behavior of the Green's function of a parabolic equatio order $2n$ as $t \to 0$ and as $x \to \infty$. (Russian. Azerbaijani summary) **45** #5608

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Lundina, D. Š. The accuracy of the reconstruction of eigenfunctions from incom scattering data. (Russian) **57** #6898

Mangeron, Dumitru Ion (*with* Oğuztöreli, Mehmet Namık) Problems concerning polyvibrating equations. I. Solutions in the form of an *F*-function. (Roma summary) **45** #751

Mežgailis, V. F. A certain property of node surfaces of eigenfunctions of the Helm equation in a cube-like domain. (Russian) (Not reviewed)

Micheletti, Anna Maria Metrica per famiglie di domini limitati e proprietà gener degli autovalori. **51** #13479

Miersemann, Erich Verzweigungsprobleme für Variationsungleichungen. **52** #8681

Ōeda, Kazuo Approximation of obstacles by high potentials; convergence of eigenvalues. **45** #5609

Oğuztöreli, Mehmet Namık Eigenvalue problems for Mangeron's polyvibrating equations. I. (Romanian summary) **46** #550

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Oleĭnik, O. A. (*with* Radkevič, E. V.) Estimates for the eigenfunctions and solutions of certain systems of partial differential equations that depend on a parameter. (Russian) **53** #1054

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Rauch, Jeffrey B. The mathematical theory of crushed ice. **55** #893

  Scattering by many tiny obstacles. **55** #894

Rousselet, Bernard Étude de la régularité de valeurs propres par rapport à des déformations bilipschitziennes du domaine géométrique. (English summary) **55** #895

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Sigal, I. M. On the discrete spectrum of the Schrödinger operators of multiparticle systems. **54** #13344

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Simon, Barry Pointwise bounds on eigenfunctions and wave packets in N-body quantum systems. I, II. **54** #5646

  Pointwise bounds on eigenfunctions and wave packets in N-body quantum systems. III. **54** #5647

Suzuki, Kazumasa Some remarks on eigenvalue problems. (Japanese) **45** #5610

Temam, Roger A non-linear eigenvalue problem: the shape at equilibrium of a confined plasma. **54** #759

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Deavours, C. A. A boundary value problem whose solution involves equations nonlinear in an eigenvalue parameter. (**45** #5579)

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Frank, Léonid S. General boundary value problems for ordinary differential equations with small parameter. (**58** #22744)

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Levitan, B. M. Lie theorems for generalized shift operators. (Russian) (**47** #4058)

Ljašenko, Ī. M. Certain variational theorems on the eigenvalues of the finite difference Laplace operator, and their application. (Russian. English summary) (**45** #7329)

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Patissier, Guy Sur les fonctions analytiques d'un opérateur elliptique. (English summary) (**55** #4291)

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35Qxx Special equations and problems [See also 35J05, 35K05, 35L05.]

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Volosevič, P. P. (*with* Levanov, E. I.; Masljankin, V. I.) Self-similar motions of a plasma for the case when the absorption coefficient depends on the flux radiation. (Russian. English summary) (**58** #25430)

35Q05 Euler-Poisson-Darboux equation and generalizations

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Carroll, Robert Wayne (*with* Silver, Howard) Growth properties of solutions of certain "canonical" hyperbolic equations with subharmonic initial data. **50** #10572

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Colton, David L. (*with* Gilbert, Robert Pertsch) Function theoretic methods in the theory of boundary value problems for generalized metaharmonic functions. **53** #13871

Delache, Solange (*with* Leray, J.) Calcul de la solution élémentaire de l'opérateur d'Euler-Poisson-Darboux et de l'opérateur de Tricomi-Clairaut, hyperbolique, d'ordre 2. **46** #2261

Díaz, Joaquin B. (*with* Young, Eutiquio C.) A singular characteristic boundary value problem for the Euler-Poisson-Darboux equation. **48** #732

  (*with* Leschen, John G.) A remark on a mean value theorem of Alexander Weinstein in generalized axially symmetric potential theory. **51** #10905

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Volkodavov, V. F. (*with* Nikolaev, N. Ja.) Solution of four boundary value problems for the Euler-Darboux equation. (Russian) **58** #29428
  (*with* Nikolaev, N. Ja.) Uniqueness of the solution of two boundary value problems with discontinuous glueing conditions. (Russian) **58** #29429
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Ebin, David G. The group of diffeomorphisms, and motion of fluids. (**50** #8599)
Eldesbaev, T. On inverse problems for the Euler-Darboux-Poisson equation. (Russian) (**58** #29489)
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Sysoev, Ju. S. Differential equations on a Lie group. (Russian) (**51** #13133)

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35R25 Improperly posed problems

Amirov, A. H. *See* **Lavrent′ev, M. M.,** **53** #13891; **Lavrent′ev, M. M.,** **58** #6779 *a* **Lavrent′ev, M. M.,** **58** #12038

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Lavrent′ev, M. M. ★Условно-корректные задачи для дифференциальных уравнени (Russian) [Conditionally well-posed problems for differential equations] (Not reviewed)

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35S15 Boundary value problems

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39–XX FINITE DIFFERENCES AND FUNCTIONAL EQUATIONS

(Aczél, S.) *See* **Bibliography: Functional equations, 52** #1073

(Diderrich, George T.) *See* **Bibliography: Functional equations, 52** #1073 *and* **Bibliography: Functional equations, 58** #29508

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Picca, D. Su una estensione complessa dei teoremi di E. Cesàro. **58** #17639
Prachar, K. Über einige einfache Folgen und Reihen im Schulunterricht. **51** #1188
Rao, B. V. *See* **Rao, M. Bhaskara; et al., 58** #12068
Rao, K. P. S. Bhaskara *See* **Rao, M. Bhaskara; et al., 58** #12068
Rao, M. Bhaskara (*with* Rao, K. P. S. Bhaskara; Rao, B. V.) Remarks on subsequences, subseries and rearrangements. **58** #12068
Robinson, Lewis Bayard Functional integral equations and divergent series. **50** #7878
Rogge, Lothar *See* **Landers, Dieter, 52** #8710 *and* **Landers, Dieter, 58** #12067
Rosenblatt, Joseph Max Convergence of series of translations. **58** #12069
Rudin, Walter A very slowly convergent sequence of continuous functions. **47** #3873
Russell, Dennis C. On bounded sequences satisfying a linear inequality. **50** #819
Sabharwal, C. L. S-distribution theory. **50** #5257
Safoev, M. D. (*with* Širinbekov, M.) The convergence of Newton series in three complex variables. (Russian. Tajiki summary) **54** #13363
Safonov, A. N. Application of Kummer and Markov transformations to divergent series. (Russian) (See RŽMat **1972** #5 B41)
Saint-Raymond, Jean Convergence d'une suite de fonctions. **48** #748
Sayer, F. P. The sums of certain series containing hyperbolic functions. **54** #5663
Schawe, D. P. A Cauchy condition for functions. **46** #7752
Schrader, Keith W. (*with* Umamaheswaram, S.) Almost everywhere convergence for sequences of continuous functions. **50** #5259
Scraton, R. E. On divergent series. **58** #17640
Segal, Sanford L. On $\Sigma(1/n)\sin(x/n)$. **45** #5617
Sengupta, S. B. Some notes on some well-known results on the distance sets. **54** #8068
Shiu, Peter A generalization of some convergence tests. **58** #6800
How slowly can a series converge? **58** #6801
Širinbekov, M. *See* **Safoev, M. D., 54** #13363
Smith, John Howard Rearrangements of conditionally convergent real series with preassigned cycle type. **50** #5258
Speakman, Jane M. O. An algebraic characterisation of convergence ideals. (See Zbl **162**, 83)
Stoller, Gerald S. The convergence-preserving rearrangements of real infinite series. **58** #6802
Strîmbu, Cecilia The effect of summation by arithmetic means and of its inverse operation on the rate of convergence of numerical series with positive terms. (Romanian. French summary) **53** #1084
Stroud, L. John On $x = a^x$. **58** #6803 (E **58** #6805)
On Mathematical Note 3232 (Math. Gaz. **53** (1969), no. 385, 289–293). **58** #6804
Šul'gina, L. T. Improving the convergence of sequences that are nearly a linear combination of exponential functions. (Russian) **49** #11091
Takeuchi, Yu The domain of convergence of the series $\sum_{n=1}^{\infty} C_n/|x-x_n|$. (Spanish) **56** #9129
Tandori, Károly Weitere Bemerkungen über die Konvergenz und Summierbarkeit der Funktionenreihen. **55** #917
Thornburg, James L. Convergent subsequences from sequences of functions. **51** #8667
Todd, John The many limits of mixed means. I. **58** #12070
Toscano, Letterio Sur la somme de deux séries du type intégro-géométriques et exponentielles généralisées. **46** #5882
Tret'jakov, V. P. On the question of the formal multiplication of series. (Russian) **45** #7341
Tripathi, Shankar Sharan A note on the absolute convergence of factored infinite series. (Hindi. English summary) **48** #6753
Udovičić, Enes The convergence of sequences defined by difference equations. (Serbo-Croatian. English summary) **56** #16193
Umamaheswaram, S. *See* **Schrader, Keith W., 50** #5259
Vaaler, Jeffrey D. *See* **Hall, Marshall, Jr., 54** #10916
Vinuesa Tejedor, Jaime First order Jacobi α-matrices. Criteria of classification (conclusion). (Spanish) (See Zbl **332** #33012)
Wadhwa, A. D. An interesting subseries of the harmonic series. **52** #1083
Williams, Kenneth S. On $\sum_{n=1}^{\infty} (1/n^{2k})$. **45** #3997
Wynn, Peter Invariants associated with the epsilon algorithm and its first confluent form. **49** #11092
Hierarchies of arrays and function sequences associated with the epsilon algorithm and its first confluent form. **50** #7879
Yang, Kuo Shêng *See* **Chang, Kuo Tsai, 51** #8666
Zaman, M. B. On consistency of T-matrices for (C, r)-bounded sequences. **57** #13281

Secondary classifications:

Barbieri, Francesco (*with* Facchinetti, Gisella) Una definizione di limite e la sublinearità. (**54** #11260)
Facchinetti, Gisella *See* **Barbieri, Francesco,** (**54** #11260)
Fleischer, J. Nonlinear Padé approximants for Legendre series. (**48** #592)
Gosper, R. William, Jr. A calculus of series rearrangements. (**56** #9899)
Grimeisen, Gerhard Darstellung des iterierten Massintegrals als Limes von iterie Zwischensummen. I. (**54** #10543)
Kašin, B. S. The stability of unconditional almost everywhere convergence. (Russ (**48** #8737)
Mihalin, G. O. Ineffective linear integral transformations that preserve converge (Russian) (**53** #1193)
Picone, Mauro Sugli intervalli oscillatorii di alcune variabili reali ordinate. (Eng summary) (**49** #7400)
Pleasants, P. A. B. Rearrangements that preserve convergence. (**55** #5452)
Šul'gina, L. T. The linear transformation with constant coefficients of functions of integral arguments. (Russian) (**46** #563)
Švarcman, P. A. The convergence of an iteration series. (Russian) (**57** #550)
Udovičić, Enes On the convergence of sequences defined by difference equati (**45** #2347)
Williams, Richard K. Composition of convergent sequences. (**49** #1464)
Zdun, Marek Cezary On the iteration of the hat-functions. (**57** #551)

40A10 Convergence and divergence of integrals

Gaĭmnazarov, G. Imbedding theorems for the $L_p(-\infty, \infty)$ classes of functions. (Russ **46** #4046
Ibragimov, F. I. The domain of convergence of a multiple integral of Laplace-Stie type. (Russian. Azerbaijani and English summaries) **57** #6933
Jain, Prabha An integrability theorem for power series. **48** #4566
Leindler, László An integrability theorem for power series. **53** #11257
Mel'nik, D. P. A necessary condition for the convergence of n-dimensional impro integrals of the first kind. (Ukrainian. Russian summary) **48** #6754
Nutfullin, Š. N. A test for the convergence of improper multiple integrals. (Russ **54** #8069
Orudžev, G. A. The domain of convergence of an integral of Laplace-Stieltjes t (Russian. Azerbaijani and English summaries) **57** #6934
Ram, Babu Integrability theorems for power series. **51** #1189
Tevzadze, N. R. Improper double integrals. (Russian. Georgian summary) **53** #108
Türnpu, H. The convergence of integrals almost everywhere. (Russian. Estonian English summaries) **51** #6206
Wynn, P. A convergence theory of some methods of integration. **54** #3210

Secondary classifications:

Rydzewska, Barbara Approximation des fonctions par des intégrales singulières ordinaires. (Polish and English summaries) (**52** #6337)
Approximation des fonctions de deux variables par des intégrales singuli doubles. (Polish and English summaries) (**52** #6338)

40A15 Convergence and divergence of continued fractions [See a 30A22.]

Batjuk, Ju. R. Inverse Fantappiè derivatives and Thiele's formula for functior (Ukrainian. Russian summary) **58** #23232
See also **Sjavavko, M. S., 58** #23233
Bodnar, D. Ī. (*with* Oleksīv, Ī. Ja.) A sufficient test for the convergence of a branc continued fraction with positive terms. (Russian) **53** #13911
A necessary and sufficient test of convergence of a class of branching contin fractions with positive terms. (Russian) **58** #29546
(*with* Oleksīv, Ī. Ja.) The convergence of branching continued fractions nonnegative terms. (Russian) **55** #6053
Bodnarčuk, P. Ī. Certain transformations of branching continued fractions. (Russiar **53** #13912
(*with* Īvanel, V. K.; Dzjubka, V. E.; Pustomel'nikov, Ī. P.; Slon'ovs'kiĭ, R. Computational stability of ordinary continued and branching continued fracti (Russian) **58** #29547
(*with* Skorobogat'ko, V. Ja.) Progress and problems in the theory of ordinary branching continued fractions. (Russian) **58** #29548
Bowman, Kimiko O. *See* **Shenton, L. R., 57** #13282
Dawson, David F. Continued fractions with restricted variation properties. **54** #566
Dijkstra, D. A continued fraction expansion for a generalization of Dawson's inte **57** #945
Dzjubka, V. E. *See* **Bodnarčuk, P. Ī.; et al., 58** #29547
Fair, Wyman A convergence theorem for noncommutative continued fractions. **49** #914
Fischer, Roland Konvergenzgeschwindigkeit beim Jacobialgorithmus. **53** #3536
Gill, John T., III The use of attractive fixed points in accelerating the convergenc limit-periodic continued fractions. **50** #5260
Hloponin, S. S. Transformation of the ratio of power series into the adjoint contin fraction. (Russian) (See RŽMat **1976** #10 B28; MR **56** #1654)
Convergence tests, for continued fractions, that are based on a fundame system of inequalities. (Russian) **56** #6180
Īvanel, V. K. *See* **Bodnarčuk, P. Ī.; et al., 58** #29547
Jones, William B. (*with* Magnus, Arne) Application of Stieltjes fractions to birth-d processes. **58** #6806
Kučmins'ka, H. Ĭ. The approximation of functions by branching continued fracti (Russian. English summary) **56** #16194
Corresponding and associated branching continued fractions for a double po series. (Russian. English summary) **58** #17641
Magnus, Arne *See* **Jones, William B., 58** #6806
Majumdar, S. K. (*with* Sur, B. N.) On the convergence of an infinite continued frac arising from Chebyshev equation. **52** #3775

Maksimiv, Ē. M. *See* **Slon'ovs'kiĭ, R. V., 58** #23234
Murphy, J. A. (*with* O'Donohoe, M. R.) Some properties of continued fractions with applications in Markov processes. **52** #14729
Nanjundiah, T. S. Refinements of Wallis's estimate and their generalizations. **46** #5883
Negoescu, Neculai Sur les fractions continues non commutatives. **55** #10895
    Convergence theorems on non-commutative continued fractions. **58** #1807
O'Donohoe, M. R. *See* **Murphy, J. A., 52** #14729
Oleksiv, Ī. Ja. *See* **Bodnar, D. Ī., 53** #13911 *and* **Bodnar, D. Ī., 55** #6053
Pandikow, W. *See* **Zajta, A. J., 54** #777
Pustomel'nikov, Ī. P. *See* **Bodnarčuk, P. Ī.; et al., 58** #29547
Roach, F. A. Continued fractions over an inner product space. **54** #776
Schweiger, Fritz Eine Bemerkung zu einer Arbeit von S. D. Chatterji. (Loose English summary) **46** #573
Shenton, L. R. (*with* Bowman, Kimiko O.) Generalized continued fractions and Whittaker's approach. **57** #13282
Sjavavko, M. S. (*with* Batjuk, Ju. R.) Some criteria for the convergence of continued fractions. (Ukrainian. Russian summary) **58** #23233
Skorobogat'ko, V. Ja. Scientific Conference on Continued and Branching Continued Fractions and their Applications (Lvov, 1975). (Russian) **53** #8710
    See also **Bodnarčuk, P. Ī., 58** #29548
Slon'ovs'kiĭ, R. V. (*with* Maksimiv, Ē. M.) A method of computing continued fractions. (Ukrainian. Russian summary) **58** #23234
    See also **Bodnarčuk, P. Ī.; et al., 58** #29547
Sur, B. N. *See* **Majumdar, S. K., 52** #3775
Sveklo, L. V. Some transformations of continued fractions. (Russian) **54** #13364
Vuza, Dan On a class of rational fractions. (Romanian) **54** #8070
Wynn, Peter Some recent developments in the theories of continued fractions and the Padé table. **49** #5630
Zajta, A. J. (*with* Pandikow, W.) Conversion of continued fractions into power series. **54** #777
Bibliography:
    Padé approximation *See* **Wynn, Peter, 49** #5630
Scientific Conference:
    Continued and Branching Continued Fractions and their Applications *See* **Skorobogat'ko, V. Ja., 53** #8710

Secondary classifications:

Butuc, D. On the convergence of the continued fractions in nonarchimedian analysis. (**55** #12706)
Fair, Wyman Continued fraction solution to Fredholm integral equations. (**49** #6660)
Frank, Evelyn Continued fraction expansions for the ratios of hypergeometric functions evaluated on computers. (**51** #11931)
Gill, John T., III Infinite compositions of Möbius transformations. (**47** #5237)
Hayden, T. L. Continued fractions in Banach spaces. (**49** #3579)
Magnus, Alphonse Fractions continues généralisées et matrices infinies. (**58** #3318)
Mikloško, Jozef An algorithn for calculating continued fractions. (**57** #4489)
Paluver, N. The summability of numerical series by the method of linear fractional approximations. (Russian. German summary) (**58** #3297)
Roach, F. A. Boundedness of value regions and convergence of continued fractions. (**55** #3229)
Wynn, Peter Extremal properties of Padé quotients. (**50** #4918)

40A20 Convergence and divergence of infinite products

Hornich, Hans Eine Klasse unendlicher Produkte in der Funktionentheorie. **52** #11403
Price, W. L. V. A theorem in infinite products. **50** #7880
Slipenčuk, K. M. Transformation of a certain class of infinite products. (Russian) **54** #8071
    Absolute α-power summability of infinite products. (Russian) **54** #8072
Staff, P. J. *See* **Vagholkar, M. K., 57** #17068
Vagholkar, M. K. (*with* Staff, P. J.) Infinite geometric products. **57** #17068

Secondary classifications:

Alexits, Gyorgy (*with* Szép, András) On series of product functions. (**49** #5682)
Brignon, Pierre Étude d'un produit infini, périodique, de matrices. (**45** #8663)
Clenshaw, C. W. (*with* Lord, K.) Rational approximations from Chebyshev series. (**50** #8914)
Fine, N. J. Infinite products for kth roots. (**56** #16192)
Fleischer, Isidore (*with* Joffe, Anatole) Perturbation des produits infinis et applications. (**58** #18741a)
Joffe, Anatole *See* **Fleischer, Isidore**, (**58** #18741a)
Lord, K. *See* **Clenshaw, C. W.**, (**50** #8914)
Szép, András *See* **Alexits, Gyorgy**, (**49** #5682)

40A25 Approximation to limiting values (summation of series, etc.) [For the Euler-Maclaurin summation formula, see 65B15.]

Au-Yeung, Yik Hoi A recurrence formula for $\sum_{k=1}^{n} k^{p}$. **57** #946
Brezinski, Claude Résultats sur les procédés de sommation et l' ε-algorithme. **46** #574
Bruckman, Paul S. On the evaluation of certain infinite series by elliptic functions. **57** #947
Carlitz, Leonard Summation of some double series. II. **55** #918
Cerimele, B. J. Summation of multiparameter harmonic series. **55** #13119
Chaba, A. N. (*with* Pathria, R. K.) Evaluation of lattice sums using Poisson's summation formula. IV. **58** #6807
Jain, P. C. (*with* Sharma, Bhagirath Lal) Some new summation formulae. **50** #10590
Jaiyesimi, S. B. On the summation of certain multiple series defined by a difference equation. **57** #3687
Ling, Chih Bing Generalization of certain summations due to Ramanujan. **57** #6935
Pathria, R. K. *See* **Chaba, A. N., 58** #6807
Pendjur, A. D. (*with* Uglanov, A. V.) The asymptotic behavior of the sum of a functional series. (Russian) **58** #23235
Popoviciu, Tiberiu On the behavior of certain sequences that tend to the number e. (Romanian. French summary) **52** #1084
Riedel, Roland Singuläre Integrale und singuläre Reihen. **53** #6144
Riesel, Hans Some series related to infinite series given by Ramanujan. **50** #820
Satyanarayana, Kesiraju Evaluation of $\sum_{x=1}^{\infty} 1/[x(x+1)(x+2)\cdots(x+m)]^{n}$ and allied series. **48** #4567
Schaumberger, Norman Using L'Hospital's rule to sum a series. **55** #919
Selmer, Ernst S. *See* **Skau, Ivar, 48** #749
Sharma, Bhagirath Lal *See* **Jain, P. C., 50** #10590
Skau, Ivar (*with* Selmer, Ernst S.) Some applications of Finn Holme's method for determining $\sum_{1}^{\infty} 1/k^{2}$. (Norwegian. English summary) **48** #749
Stark, Eberhard L. A new method of evaluating the sums of $\sum_{k=1}^{\infty}(-1)^{k+1}k^{-2p}$, $p=1,2,3,\ldots$ and related series. **45** #3996
    $\sum_{k=1}^{\infty} K^{-s}$, $s=2,3,4\cdots$, once more. **50** #5261
Šul'gina, L. T. Regularity of certain nonlinear transformations. (Russian) **49** #3369
Uglanov, A. V. *See* **Pendjur, A. D., 58** #23235
Wimp, Jet The summation of series whose terms have asymptotic representations. **50** #5262

Secondary classifications:

Drummond, J. E. Summing a common type of slowly convergent series of positive terms. (**57** #18017)
Gould, Henry W. A rearrangement of series based on a partition of the natural numbers. (**55** #2740)
Hawkes, John (*with* Jenkins, John D.) Infinitely divisible sequences. (**58** #18761)
Hillion, Pierre Remarque sur l'extrapolation à la limite. (**53** #6970)
Jenkins, John D. *See* **Hawkes, John**, (**58** #18761)
Platonov, M. L. On the question of the summability of series. (Russian) (**58** #17623)
Wimp, Jet A transformation for the economization of some Toeplitz summation methods. (**58** #6819)

40A99 None of the above, but in this section

Abdelkader, Mostafa A. Finite series with invariant sums. **52** #8711
Adamović, Dušan D. Sur la convergence des rapports de la somme partielle au terme général et du reste ou terme général d'une série réelle ou complexe. **48** #11838
Allasia, Giampietro Relazioni tra una classe di algoritmi iterativi bidimensionali ed una di equazioni differenziali. (English summary) **52** #11404
Brezinski, Claude Génération de suites totalement monotones et oscillantes. (English summary) **51** #1190
Bruckman, Paul S. *See* **Hoggatt, Verner E., Jr., 56** #3490
Egorova, I. A. A certain summation process. (Russian) **55** #10896
Hoggatt, Verner E., Jr. (*with* Bruckman, Paul S.) The H-convolution transform. **56** #3490
Kečkić, Jovan D. *See* **Vasić, Petar M.; et al., 48** #6755
Lacković, Ivan B. *See* **Vasić, Petar M.; et al., 48** #6755
Leindler, László (*with* Németh, József) An integrability theorem for power series. **55** #8607
Luthar, R. S. A simple way of evaluating $\sum_{i=1}^{n} i^{k}$. **55** #3593
Mitrović, Žarko M. *See* **Vasić, Petar M.; et al., 48** #6755
Muleškov, A. S. Endless exponents. (Bulgarian. Russian and English summaries) **48** #2615
Németh, József *See* **Leindler, László, 55** #8607
Ščerbakov, A. A. Cores of sequences of complex numbers and their regular transformations. (Russian) **58** #6808
Türnpu, H. Almost everywhere convergence of functional series. (Russian. Estonian and English summaries) **58** #29549
Vasić, Petar M. (*with* Kečkić, Jovan D.; Lacković, Ivan B.; Mitrović, Žarko M.) Some properties of arithmetic means of real sequences. **48** #6755

Secondary classifications:

Davies, Roy O. Limits of sequences of real functions. (**45** #6985)
Garsia, Adriano M. (*with* Joni, S. A.) A new expression for umbral operators and power series inversion. (**56** #2838)
Hovstad, Rolf M. The series $\sum_{k=1}^{\infty} 1/k^{2p}$, the area of the unit circle and Leibniz' formula. (**48** #1425)
Joni, S. A. *See* **Garsia, Adriano M.**, (**56** #2838)
Selmer, Ernst S. On Viggo Brun's illustration of Leibniz' formula for π. (**48** #1427)
Tezin, A. M. The convergence of improper integrals and numerical series. (Russian) (**45** #6989)
Wynn, Peter Sur les suites totalement monotones. (**46** #9578)

40B05 Multiple sequences and series

Antosik, Piotr Permutationally convergent matrices. **58** #23236
Azizov, B. Z. Summability of certain classes of double sequences of functions by the (R $\log m$, $\log n$, 1)method. (Russian. Azerbaijani and English summaries) (See RŽMat 1977 #9 B39)
Bahbuh, M. The convergence of double series. (Russian) **48** #750
Baron, S. A. The extension of the Moore-Kangro method to double series. (Russian) **45** #4002
Beljaev, V. A. The domains of absolute convergence of power series in two variables. (Russian) **48** #2616
Berndt, Bruce C. The evaluation of certain classes of nonabsolutely convergent double series. **52** #1085

Bobillo Guerrero, Pablo Addenda to the paper: "On the product of sequences and series" (Collect. Math. 23 (1972), 129–180). (Spanish) **50** #5263

Burljaĭ, M. F. The (C_λ)-property of the method of Abel summability for double series and theorems of Tauberian type. (Russian) **47** #7268

Čelidze, M. V. Summability of double series by the Borel method. (Russian. Georgian and English summaries) **46** #2296

Summability of double series by the $C_{\alpha\beta}$ method. (Russian. Georgian and English summaries) **52** #8712

Čelidze, V. G. The Abel summability of double series. (Russian. Georgian and English summaries) **52** #8713

A generalization of a certain theorem of Fekete. (Russian. Georgian and English summaries) **51** #8668

Filimonova, L. A. The convergence of multiple Newton series. (Russian) **48** #9161

Geče, F. Ĭ. Directed characteristics of multiple function series, and their applications. (Ukranian. English and Russian summaries) **51** #3741

Glasser, M. Lawrence Reduction formulas for multiple series. **48** #6756

Goldstein, A. J. (*with* Hall, A. D.) Solutions to a problem in power series reversion. **50** #13957

Gvazava, K. L. Hardy transformations and certain of their results. (Russian. Georgian summary) **46** #575

A certain property of a K^I-matrix. (Russian. Georgian and English summaries) **50** #7881

Introduction of K matrices, and the summability of numerical double sequences. (Russian. Georgian and English summaries) **50** #13958

Hall, A. D. *See* **Goldstein, A. J., 50** #13957

Jarkovaja, T. N. Inclusion theorems for the absolute pth power summability of double series. (Russian) **58** #29550

Kalatalova, M. A. Tauberian type theorems for double series that are summable by Cesàro methods. (Russian) **45** #5622

Karimova, M. M. *See* **Subhankulov, M. A.**, (See RŽMat **1967** #12 B29)

Kipiani, G. G. The transformation of double series. (Russian. Georgian and English summaries) **45** #772

Kravčenko, Fedor G. (*with* Kravčenko, V. F.) Domains of absolute convergence for the series that define the K_{ml_i}-functions. (Russian. English summary) **48** #751

Kravčenko, V. F. *See* **Kravčenko, Fedor G., 48** #751

Nasibov, M. H. A relation between the methods of Riesz and Riemann in the summation of double series. (Russian. Azerbaijani summary) **46** #4047

The interconnection between the $(R_{p,q})$ and Abel summability methods for double series of numbers. (Russian. Azerbaijani summary) **46** #2297

The summability of double series by the Lebesgue method. (Russian. English summary) **53** #8711

Nemsadze, B. G. Summability of multiple series. (Russian) (See RŽMat **1970** #6 B33)

Ogieveckiĭ, I. I. The directed Moore-Smith limit and infinitely multiple sequences. (Russian) **45** #3999

The convergence and summability of two-dimensional numerical sequences in the horizontal sense. (Russian) **48** #6757

(*with* Pidgaĭko, A. I.) Double numerical sequences of bounded variation. (Russian. Estonian and English summaries) **52** #1086

Pidgaĭko, A. I. The bounded convergence of multidimensional sequences. (Russian) **54** #8073

See also **Ogieveckiĭ, I. I., 52** #1086

Slīpenčuk, K. M. Absolute and strong pth power summability $(p > 1)$ of double series by matrix methods, and theorems of Tauberian type for these methods. (Russian) **58** #23237

Invertibility conditions in the theory of the summability of double series. (Russian) **57** #17069

Subhankulov, M. A. (*with* Karimova, M. M.) A sharpening of the Hardy-Littlewood theorem and the Knopp theorem on double power series. (Russian) (See RŽMat **1967** #12 B29)

Šul′gina, L. T. An interpolational transformation with an increasing number of nodes of functions of two integral arguments. (Russian) **45** #2362

Täht, T. Multipliers of BK-spaces. (Russian. Estonian and English summaries) **57** #17070

Tevzadze, N. R. Certain questions on the convergence of double series. (Russian. Georgian summary) **53** #8712

Zucker, I. J. Exact results for some lattice sums in 2, 4, 6 and 8 dimensions. **53** #11258

Secondary classifications:

Beljaev, V. A. The convergence and absolute convergence of double series of polynomials. (Russian) (**45** #7094)

Filimonova, L. A. The domain of absolute convergence of multiple Dirichlet series. (Russian) (**53** #5920)

Janušauskas, Algimantas Elementary theorems on the convergence of double Dirichlet series. (Russian) (**56** #651)

Jarkovaja, T. N. Invertibility conditions in the theory of absolute summability of double series. (Russian) (**58** #29570a)

Theorems of Tauberian type for the summability of double series. (Russian) (**58** #29560)

Karande, B. K. (*with* Thakare, Nimbakrishna) On certain q-orthogonal polynomials. (**58** #22706)

Sharma, Bhagirath Lal A generalization of Bailey's formula. (**57** #10017)

Shere, Kenneth D. On multiple asymptotic expansions. (**47** #577)

Slipenčuk, K. M. A theorem of Tauberian type for the case of the summation of double series. (Russian) (**58** #29563)

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Fridy, John A. Summability of rearrangements of sequences. (**52** #3772)
  Minimal rates of summability.' (**58** #12066)
Hartmann, Frederick W. Summability tests for singular points. (**47** #3649)
Husain, Syed A. On uniform summability-Λ of orthonormal expansions of functions of class L^∞. (**58** #29786)
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Borwein, David (*with* Kratz, Werner) On the zeros of the power series $\sum_{n=0}^{\infty}(-1)^n(1-c^{-n-1})^{k}z^{n}$ with an application to discontinuous Riesz-summability. (**56** #3261)

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40C99 None of the above, but in this section

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(*with* Awaad, Layla) On Tauberian estimates for quasi-Hausdorff transformations. **57** #6938b

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40D15 Convergence factors and summability factors

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On the $|\bar{N}, p_n|$-summability factors of infinite series. **50** #823

Baron, S. A. A certain matrix transformation of double sequences. (Russian. Estor and German summaries) **52** #3779

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Mishra, Babban Prasad On strong Riesz summability factors of infinite series. **46** #

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Ziv, Abraham Rate of growth and convergence factors for power methods of limitat **54** #5667

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Kumar, Arun Necessary and sufficient type theorem for absolute Nörlund summab of conjugate series. (**58** #23324)

Lahiri, B. K. On series with real terms. (**48** #2614)

40D20 Summability and bounded fields of methods

Atalla, Robert E. On the consistency theorem in matrix summability. **46** #7754

Beekmann, Wolfgang (*with* Boos, Johann; Zeller, Karl) Der Teilraum P im Wirk eines Limitierungsverfahrens ist invariant. **48** #752

Boos, Johann *See* **Beekmann, Wolfgang; et al.**, **48** #752

Buntinas, Martin On sectionally dense summability fields. **48** #6760

Chandrasekhara Rao, K. Continuous matrices of type M. **46** #4053

Davidov, M. O. Summability of bounded sequences by regular matrices. (Russ 52 #11405

DeVos, Robert (*with* Hartmann, Frederick W.) Sequences of bounded summab domains. **58** #1812

Goffman, Casper (*with* Wollan, G. N.) Sequences of regular summability matr **46** #7755

Goĭhman, V. È. Some remarks on fields of summability of regular matrices. (Russ **57** #13285

Hartmann, Frederick W. *See* **DeVos, Robert**, **58** #1812

Kuttner, Brian (*with* Thorpe, Brian) On strong Nörlund summability fields. **45** #5

Petersen, Gordon M. Addendum: "Summability fields which span the bounded sequences densely" (Bull. London Math. Soc. **2** (1973), 187–191). **54** #8077

Sokolenko, O. Ī. The summability of bounded sequences by regular matrices. (Russ 52 #11406

The summability of bounded sequences by positive K-matrices. (Russian) **52** #11407
Soomer, V. Almost summability fields. (Russian. Estonian and English summaries) **52** #3782
Thorpe, Brian *See* **Kuttner, Brian, 45** #5618
Wollan, G. N. *See* **Goffman, Casper, 46** #7755
Zeller, Karl *See* **Beekmann, Wolfgang; et al., 48** #752

Secondary classifications:

Brown, Herbert I. (*with* Crawford, J. P.; Stratton, Howard H.) On summability fields of conservative operators. (**55** #13288)
Crawford, J. P. *See* **Brown, Herbert I.; et al.,** (**55** #13288)
Stratton, Howard H. *See* **Brown, Herbert I.; et al.,** (**55** #13288)

40D25 Inclusion and equivalence theorems

Aljančić, Slobodan Deux théorèmes merceriens asymptotiques pour des suites à comportement lent. **51** #10944
Atalla, Robert E. Inclusion theorems for bounded convergence fields. **52** #11408
Boos, Johann Verträglichkeit von konvergenztreuen Matrixverfahren. **47** #5480
Ersetzbarkeit von konvergenztreuen Matrixverfahren. **51** #10945
Borwein, David (*with* Cass, Frank P.) Equivalence of Riesz methods of summability. **54** #5668
Bustoz, Joaquin (*with* Wright, Donald J.) On Gronwall summability. **45** #4000
On the relation between $[f,g]$ and A_λ summability. **51** #13512
Cass, Frank P. (*with* Chang, Edward H.) Note on some strict inclusion theorems between Cesàro and discrete Riesz methods of summability. **51** #13513
(*with* Rhoades, Billy E.) Mercerian theorems via spectral theory. **57** #10304
See also **Borwein, David, 54** #5668
Chandra, Prem An inclusion theorem for Nörlund summability. **49** #11094
A note on an inclusion theorem. **56** #12696
Chang, Edward H. *See* **Cass, Frank P., 51** #13513
Chang, Shao Chien Some closure properties. **50** #2736
Chen, Ming Po On some methods of summability. II. **47** #7269
Das, G. Corrections to the paper: "Some inclusion theorems for Nörlund methods" (J. Indian Math. Soc. (N.S.) 35 (1971), 241–248 (1972)). **48** #4570
Inclusion theorems for an absolute method of summability. **47** #5481
Dubinsky, Ed (*with* Ramanujan, Melapalayam S.) Inclusion theorems for absolutely λ-summing maps. **45** #2371
Edwards, J. R. (*with* Wayment, Stanley G.) On the nonequivalence of conservative Hausdorff methods and Hausdorff moment sequences. **46** #4054
Groetsch, C. W. Summation methods associated with an iteration. **52** #3783
Heagy, E. C. (*with* Shawyer, Bruce L. R.) On integral Abel-type and logarithmic methods of summability. **57** #6939
Hoischen, Lothar Über die Wirkfelder einer allgemeinen Klasse von Limitierungsverfahren. **47** #2224
Hudak, Ju. I. Two inclusion theorems for the generalized series summability method $T\{\lambda_k\}$. (Russian) **45** #768
Jakimovski, Amnon (*with* Tzimbalario, Jean) Inclusion relations for Riesz typical means. **46** #4055
(*with* Russell, Dennis C.; Tzimbalario, Jean) Inclusion theorems for matrix transformations. **48** #6761
(*with* Tzimbalario, Jean) Inclusion relations for general Riesz typical means. **51** #1195
(*with* Tzimbalario, Jean) Inclusion relations for absolute Riesz means and on a conjecture by Maddox. **51** #3745
Jeyarajan, P. A. An inclusion theorem in summability. **49** #920
Kayashima, Ikuko On relations between Nörlund and Riesz means. **50** #7884
Kohanivs′kiĭ, O. P. A condition for the equivalence of logarithmic summability methods. (Russian) **51** #13514
Conditions for the equivalence of the discrete and the semicontinuous logarithmic summability method. (Russian) **55** #922
Kumar, Ashok On functional methods. (Serbo-Croatian summary) **50** #2737 (E **53** #8715)
Corrigendum: "On functional methods" (Glasnik Mat. Ser. III **9(29)** (1974), 95–104). **53** #8715
Generalised strong Nörlund summability. **54** #13366
On some methods of summability. **55** #3597
Kuttner, Brian On de la Vallée Poussin and Abel summability. **47** #7270
On iterated Riesz transforms of order 1. **50** #5266
(*with* Lawrence, L. H.) On Mercerian sets. **57** #951
Kwee, B. On absolute de la Vallée Poussin summability. **47** #7271
On a summation method of S. Verblunsky. **46** #5886
The Riesz summability of logarithmic type. **50** #824
Lawrence, L. H. *See* **Kuttner, Brian, 57** #951
Martić, Branislav Certain incomparability and translativity relations for the $S^{\alpha,\beta}$ summability method. (Serbo-Croatian. English summary) **50** #2738
Mihalin, G. O. A certain inclusion property for summability methods that are definable by matrices with finite rows. (Russian) **48** #9163
A generalization of a theorem of Agnew, and the equivalence on the set of bounded sequences of Kojima's methods to Cesàro's methods for the summability of series. (Russian) **50** #10595
Petersen, Gordon M. The relationship of matrix norms to matrix singularities. **47** #3875
Rajagopal, C. T. (*with* Rangachari, M. S.) On typical Riemann and Bessel summabilities. **46** #7756
Ramanujan, Melapalayam S. *See* **Dubinsky, Ed, 45** #2371
Rangachari, M. S. *See* **Rajagopal, C. T., 46** #7756
Rhoades, Billy E. A sufficient condition for total monotonicity. II. **58** #23242
See also **Cass, Frank P., 57** #10304
Russell, Dennis C. *See* **Jakimovski, Amnon; et al., 48** #6761
Shawyer, Bruce L. R. On the product of the Cesàro and Borel-type methods of summability. **48** #753
See also **Heagy, E. C., 57** #6939
Singh, Vijendra On a relation between harmonic summability and Riemann summability. **50** #13961
Skerry, H. B. An inclusion theorem for generalized Lototsky summability methods. **46** #7757
(*with* Wilansky, Albert) Inclusion relations between row-finite matrices and triangles. **48** #9164
Somasundaram, D. Inclusion theorems of matrix transformations of some sequence spaces over non-archimedian field. II. **52** #6241
Soni, Kusum L. Slowly varying functions and generalized logarithmic summability. **53** #13917
Thorpe, Brian An inclusion theorem and consistency of real regular Nörlund methods of summability. **47** #5482
Tripathy, Niranjan On products of summability methods. **49** #921
Tzimbalario, Jean On a question posed by D. Leviatan and L. Lorch. **46** #9589
Total inclusion between matrix transformations. **48** #11840
See also **Jakimovski, Amnon, 46** #4055; **Jakimovski, Amnon; et al., 48** #6761; **Jakimovski, Amnon, 51** #1195 *and* **Jakimovski, Amnon, 51** #3745
Udalaja, N. I. Inclusion theorems for matrix methods in the summability of series. (Russian) **57** #17072
Wayment, Stanley G. *See* **Edwards, J. R., 46** #4054
Wilansky, Albert *See* **Skerry, H. B., 48** #9164
Wright, Donald J. *See* **Bustoz, Joaquin, 45** #4000
Žavoronkov, V. D. Summability by numerical matrices in complete locally convex spaces. (Russian) **57** #17073
Ziv, Abraham Inclusion relations between power methods of limitation. **55** #3598

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Ahmad, Z. U. On inclusion among some absolute summability methods. (**47** #2225)
(*with* Parashar, Vinod K.) On a relation between (N, p_n) and $(R, 1, \alpha)$-summability. (**56** #12698)
Fehér, Franziska Approximationssätze auf rearrangement-invarianten Banach-Räumen über dem Torus. (**56** #16232)
Hajduković, Dimitrije F-conservative matrices. (**58** #23239)
Lazić, Milivoje G. An inclusion theorem in the general theory of matrix convergence methods. (**58** #6812)
Parashar, Vinod K. *See* **Ahmad, Z. U.,** (**56** #12698)
Snyder, Andrew K. (*with* Wilansky, Albert) Inclusion theorems and semiconservative FK spaces. (**46** #9594)
Tammeraid, I. Tauberian theorems with a remainder term for the Cesàro and Hölder summability methods. (Russian. Estonian and English summaries) (**51** #8674a)
Tauberian theorems with a remainder term for the Euler-Knopp summability method. (Russian. Estonian and English summaries) (**51** #8674b)
Wilansky, Albert *See* **Snyder, Andrew K.,** (**46** #9594)
Ziv, Abraham A non-equivalence theorem for power methods of limitation. (**50** #7883)
Inclusion relations between power methods and matrix methods of limitation. (**58** #1811)

40D99 None of the above, but in this section

Goĭhman, V. È. A generalization of the concept of slow oscillation, and its connections with Tauberian theorems. (Russian) **50** #13962
Certain structural problems of the fields of effectiveness of regular matrices. (Russian) **50** #13963
Kangro, Gunnar The λ-perfectness of summability methods, and applications of it. I. (Russian. Estonian and English summaries) **45** #2372
The λ-perfectness of summability methods and applications of it. II. (Russian. Estonian and English summaries) **45** #4004
Kotkowski, Bogdan (*with* Magdziarz, Janusz; Waszak, Aleksander) Some remarks on continuous methods of summability. **56** #6182
Magdziarz, Janusz *See* **Kotkowski, Bogdan; et al., 56** #6182
Tripathy, Niranjan Errata: "A relation between two incomparable summability methods" (J. Indian Math. Soc. (N.S.) 37 (1973), 303–314 (1974)). **53** #13918
Waszak, Aleksander *See* **Kotkowski, Bogdan; et al., 56** #6182
Zamansky, Marc Théorie de l'approximation. **50** #10596

40E05 Tauberian theorems

Aljančić, Slobodan Asymptotic Mercerian theorems involving slowly varying functions. **49** #5633
Alpár, László Tauberian theorems for power series in several variables. I. (Hungarian) **58** #6815
An, F. I. *See* **Subhankulov, M. A., 45** #775 *and* **Subhankulov, M. A., 51** #6209
Arandelović, D. Sur un théorème mercerien asymptotique général pour des fonctions à comportement régulier. **57** #10305
Baltes, H. P. An Abelian and a Tauberian theorem for the Bose-Einstein summation. **50** #7885
Belogrud′, V. P. A certain Tauberian theorem. (Russian) **52** #8716
On the Tauberian theorem of Ja. T. Sultanaev. (Russian) **58** #6816
Bojanic, Ranko (*with* Lee, Y. H.) A survey of recent results and problems in the study of convolution products of sequences. **49** #5634
Bolgov, V. A. A certain Tauberian theorem. (Russian) **51** #10946
Tauberian constants for summability methods that are defined by a function. (Russian) **52** #3784
Borwein, David (*with* Smet, E.) Tauberian theorems for Borel-type methods of

summability. **50** #13964 (E **54** #13367)

(*with* Smet, E.) Addendum to: "Tauberian theorems for Borel-type methods of summability" (Canad. Math. Bull. **17** (1974), 167–173). **54** #13367

(*with* Watson, B.) A Tauberian theorem for Abelian summability methods. **54** #781

(*with* Watson, B.) Tauberian theorems on a scale of Abel-type summability methods. **58** #17646

See also **Robinson, Irvine J. W.**, **52** #8720

Burljaĭ, M. F. The (C_λ)-property of the Borel summability method for double series and theorems of Tauberian type. (Russian) **46** #5887

A certain property of the $(\bar{R},p_m,q_n)$-methods of summability of double series, and theorems of Tauberian type. (Russian) **48** #9165

The logarithmic method for the summability of numerical double series. (Russian) **54** #13368

Cankova, M. G. *See* **Karagaeva, T.**, **47** #678

Čelidze, È. V. Limiting theorems for double integrals. (Russian. Georgian and English summaries) **48** #9166

Chandra, Prem A note on Tauber's second theorem. **58** #29558

Chang, Ch'iu Chün On a Tauberian theorem involving weaker factors. **57** #13286

Davidov, M. O. The C^α-property of Cesàro methods for the summability of series, and theorems of Tauberian type. (Russian) **48** #9167

A generalization of two Tauberian theorems of Hardy and Littlewood. (Russian) **51** #3746

Theorems of Tauberian type for the iteration of methods of weighted arithmetic averages. (Russian) **56** #16196

Dawson, David F. A Tauberian theorem for stretchings. **53** #8716

Diamond, Harold George On a tauberian theorem of Wiener and Pitt. **45** #4012

(Freĭman, G. A.) *See* **Postnikova, L. P.**, **50** #10597

Gaier, Dieter ★Complex variable proofs of Tauberian theorems. **57** #6940

Ganelius, Tord H. ★Tauberian remainder theorems. **58** #17647

Goes, Günther On a Tauberian theorem for sequences with gaps and on Fourier series with gaps. **49** #922

Hirokawa, Hiroshi Tauberian theorems for $(\mathfrak{R},p,\alpha)$ summability. **49** #3370

Izrailova, M. M. *See* **Subhankulov, M. A.**, (See RŽMat **1968** #2 B15)

Jakimovski, Amnon (*with* Livne, Avishai) Tauberian theorems for $[J,f(x)]$ transformations. **48** #11841

Jarkovaja, T. N. A theorem of Tauberian type for the strong pth power summability $(p>1)$ of double series by matrix methods. (Russian) **58** #29559

Theorems of Tauberian type for the summability of double series. (Russian) **58** #29560

Jeyarajan, P. A. A Tauberian theorem for the generalised Abel method of summability. II. **48** #9169

A Tauberian theorem for the generalized Abel method of summability. I. **48** #9168

Jordan, G. S. Regularly varying functions and convolutions with real kernels. **49** #7642

Jukes, Ken A. (*with* Maddox, Ivor J.) Tauberian conclusions. **53** #8717

See also **Segal, Sanford L.**, **50** #13966

Jurkat, W. B. (*with* Kratz, Werner; Peyerimhoff, A.) The Tauberian theorems which interrelate different Riesz means. **52** #8718

Kangro, Gunnar A Tauberian theorem with a remainder term for the Riesz method. I, II. (Russian. Estonian and English summaries) **53** #3540

Kano, Takeshi Remark to a Tauberian theorem for Borel summability. **48** #2617

Remarks to some Tauberian conditions of mean type. **52** #14732

Karagaeva, T. (*with* Cankova, M. G.) Kronecker's Tauberian theorem on summability by means of the Bessel polynomials. (Bulgarian. Russian and German summaries) **47** #678

Kohanīvs'kiĭ, O. P. (l)-property of the semicontinuous logarithmic method of summability of series, and theorems of Tauberian type. (Russian) **50** #7886

Theorems of Tauberian type for a semicontinuous logarithmic method of summability of series. (Russian) **51** #3747

Kratz, Werner *See* **Jurkat, W. B.; et al.**, **52** #8718

Krishnan, V. K. Gap Tauberian theorem for generalized Abel summability. **53** #3541

Kuttner, Brian A Tauberian theorem for Cesàro summability. **56** #9132

A counter-example in summability theory. **57** #6941

Kwee, B. A Tauberian theorem for the (J,p_n) method of summation. **45** #7346

Lata, P. A Tauberian theorem. **52** #8719

Lee, Kin Chun Tauberian theorems for Borel-type methods of summability. **54** #782

Lee, Y. H. *See* **Bojanic, Ranko**, **49** #5634

Levin, Jacob J. (*with* Shea, Daniel F.) Tauberian theorems and functional equations. **54** #5669

Levinson, Norman On the elementary character of Wiener's general Tauberian theorem. **48** #4571

Livne, Avishai *See* **Jakimovski, Amnon**, **48** #11841

Lorentz, Georg Gunther (*with* Zeller, Karl) o-but not O-Tauberian theorems. **49** #11095

Luther, Wolfram Quelques théorèmes taubériens. (English summary) **52** #3785

The remainder in a gap Tauberian theorem for Abel summability. **55** #923

Lyttkens, Sonja An application of a general Tauberian remainder theorem. **55** #924

Maddox, Ivor J. Some general Tauberian theorems. **48** #9170

Tauberian estimates. **55** #10897

See also **Jukes, Ken A.**, **53** #8717

Mel'nik, V. Ī. A Tauberian theorem for the Borel summability method. (Russian) **45** #774

A Tauberian theorem for Valiron summability methods. (Russian) **58** #17648

Tauberian theorems for summability methods of the type of Borel's method. (Russian) **58** #29561

Meyer-König, Werner (*with* Zeller, Karl) Summability fields with a Tauberian transition property. **51** #10947

Mihalīn, G. O. (*with* Teslenko, L. S.) A property of a class of $(\bar{R},p_n,\alpha)$ summability methods for series, and theorems of Tauberian type. (Russian) **58** #17649

Theorems of Tauberian type for (J,p_n)-methods of summability. (Russian) **58** #29568

Mishra, Babban Prasad (*with* Singh, Dinesh) Some Tauberian theorems on A_λ summability methods of integrals. **57** #6942

Moh, Tzuong Tsieng On a general Tauberian theorem. **47** #5483

Nasibov, M. H. A Tauberian theorem of Wiener type for multiple integrals. (Russia Azerbaijani summary) **58** #12074

Nemsadze, B. G. Wiener Tauberian theorems for functions of two variables. (Russia (See RŽMat **1970** #7 B82)

A certain generalization of Wiener's theorem, and some applications of (Russian. Georgian and English summaries) **50** #2739

Novikova, N. S. Theorems of Tauberian type for matrix transformations of doub sequences. (Russian) **54** #8078

Theorems of Tauberian type for integral transformations of functions of tw variables. (Russian) **58** #29562

Parameswaran, Mangalam R. Some Tauberian theorems for the circle family of summability methods. **52** #3786

A Tauberian theorem for the product of the logarithmic and Cesàro methods summability. (See Zbl **346** #40005)

Some Tauberian theorems related to the logarithmic methods of summabilit (Serbo-Croatian summary) **57** #10306

On a generalization of a theorem of Meyer-König. **58** #23243

Peterson, G. E. Tauberian theorems for integrals. I, II. **47** #5484

Slowly oscillating functions. **50** #2740

Peyerimhoff, A. *See* **Jurkat, W. B.; et al.**, **52** #8718

Phillips, R. A Tauberian theorem for a scale of logarithmic methods of summatio **50** #825

Postnikova, L. P. ★Тауберова теория с приложениями к аналитической теори чисел. (Russian) [Tauberian theory with applications to the analytic theory numbers] **50** #10597

Rajagopal, C. T. On a theorem of L. A. Rubel's for Pólya means. **58** #17650

On Tauberian theorems for generalized Abel summability. **48** #9171

(*with* Rangachari, M. S.) Two Tauberian theorems for typical Lambert summability. **47** #9117

On Tauberian theorems for some standard methods of summability. **54** #3215

Rangachari, M. S. *See* **Rajagopal, C. T.**, **47** #9117

Rath, Dipty Tauberian theorems in the theory of absolute Riesz summability. **50** #13965

Reĭmers, È. G. Tauberian theorems for numerical series. (Russian. Estonian and Englis summaries) **58** #1813

Robinson, Irvine J. W. (*with* Borwein, David) A Tauberian theorem for Borel-typ methods of summability. **52** #8720

Rusev, Pet"r K. A theorem of Tauberian type for the summability of series by means Laguerre polynomials. (Russian) **55** #13121

Saari, Donald Gene An elementary Tauberian theorem for absolutely continuous functions and for series. **50** #5267

Safarov, T. M. Complex Tauberian theorems of the type $A\to(R,n,\beta)$. (Russian) **56** #16199a

Complex Tauberian theorems of the type $(A,\lambda)\to(R,\lambda,\beta)$ with a remainde (Russian) **56** #16199b

Complex Tauberian theorems with a remainder term for general Dirichlet serie (Russian. Azerbaijani and English summaries) **51** #8672

See also **Subhankulov, M. A.**, **49** #7643 *and* **Subhankulov, M. A.**, **56** #16200

Segal, Sanford L. Addendum to: "On Tauberian theorems of Landau-Ingham type" (London Math. Soc. (2) **8** (1974), 570–576) by K. A. Jukes. **50** #13966

Seneta, Eugene A Tauberian theorem of E. Landau and W. Feller. **50** #10598

Shawyer, Bruce L. R. (*with* Yang, Kuo Shêng) Tauberian relations between the Abel-type and the Borel-type methods of summability. **45** #2369

Shea, Daniel F. *See* **Levin, Jacob J.**, **54** #5669

Singh, Dinesh *See* **Mishra, Babban Prasad**, **57** #6942

Sitaraman, Y. (*with* Swaminathan, V.) Tauberian theorems for the family $F(a,q)$ summability methods. **56** #16197

Slipenčuk, K. M. A theorem of Tauberian type for the case of the summation of doub series. (Russian) **58** #29563

Theorems of Tauberian type for matrix transformations and their application Borel's method. (Russian) **58** #29564

Smet, E. *See* **Borwein, David**, **50** #13964 (E **54** #13367) *and* **Borwein, David**, **54** #13367

Sokolenko, O. Ī. Tauberian theorems for a certain class of regular matrices. (Russia **51** #3748

On the question of Tauberian theorems. (Russian) **56** #12697

Sõrmus, T. Theorems of Tauberian type for different forms of summability. (Russia Estonian and German summaries) **46** #9590

Several generalized Tauberian theorems. (Russian. Estonian and German summaries) **51** #6210

Staffans, Olof J. Tauberian theorems for a positive definite form, with applications to Volterra equation. **54** #10921

Strube, Sin Phing Moo A Tauberian remainder theorem with applications to Lambe summability. **50** #2741

Tauberian remainder theorems for the Borel methods. **51** #8673 (EA **51**)

Subhankulov, M. A. (*with* Izrailova, M. M.) Tauberian theorems with a remainder ter for double Laplace and Laplace-Stieltjes integrals. (Russian) (See RŽMat **1968** # B15)

(*with* An, F. I.) Complex Tauberian theorems of the type of the Keldyš theore with remainder. (Russian) **45** #775

A problem of Lo Kêng Hua. (Russian) **53** #13919

Complex Tauberian theorems with a remainder for power series. (Russia **56** #16198

(*with* Safarov, T. M.) Complex Tauberian theorems with a remainder term f the one-sided Stieltjes transform. (Russian) **56** #16200 (*with* Safarov, T. M.) Complex Tauberian theorems with remainder term for the one-sided Stieltjes transform. (Russian. Tajiki summary) **49** #7643

(*with* An, F. I.) Complex Tauberian theorems for the one-sided and two-sided Stieltjes transform. (Russian) **51** #6209

★Тауберовы теоремы с остатком. (Russian) [Tauberian theorems with remainder] **58** #29565

Sultanaev, Ja. T. A two-sided Tauberian theorem for ratios. (Russian) **52** #8717

Swaminathan, V. *See* **Sitaraman, Y.**, **56** #16197

Tammeraid, I. Theorems of Tauberian type with a remainder term. (Russian. English summary) (See RŽMat **1972** #7 B26; MR **53** #2569)

Tauberian theorems with a remainder term for the Cesàro and Hölder summability methods. (Russian. Estonian and English summaries) **51** #8674a

Tauberian theorems with a remainder term for the Euler-Knopp summability method. (Russian. Estonian and English summaries) **51** #8674b

Tanaka, Chuji On the summability of Taylor series of the regular function of bounded type in the unit circle. **54** #783

Teslenko, L. S. Theorems of Tauberian type for a generalized semicontinuous logarithmic method of summability of series. (Russian) **58** #29567

Two theorems of Tauberian type for Cesàro methods of summability of series. (Russian) **58** #17651

See also **Mihalin, G. O.**, **58** #17649

Tietz, Hubert Negative Resultate über Tauber-Bedingungen. **45** #2370

Permanenz- und Taubersätze bei *p V*-Summierung. **48** #754

Udalaja, N. I. A certain general theorem of Tauberian type for matrix methods of summability of series. (Russian) **49** #9471

Vernon, S. On power series with non-negative coefficients. II. **52** #3787

Volkova, N. Ī. Theorems of Tauberian type for integral transformations. (Russian) **58** #29566

Vuilleumier, Monique Elementary Tauberian theorems for regular linear operators. **51** #6211

Watanabe, Michiaki A generalization of Malliavin's Tauberian theorem. **49** #11096

Watson, B. *See* **Borwein, David**, **54** #781 *and* **Borwein, David**, **58** #17646

Yang, Kuo Shêng *See* **Shawyer, Bruce L. R.**, **45** #2369

Zeller, Karl *See* **Lorentz, Georg Gunther**, **49** #11095 *and* **Meyer-König, Werner**, **51** #10947

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Rusev, P. K. Convergence and $(C, 1)$-summability of Laguerre series at points of the boundaries of the domains of convergence. (Russian) (**55** #3369)

Sarapa, Nikola On the (c,α) summability of probability distributions defined on compact semigroups. (Serbo-Croatian summary) (**58** #29828)

Segal, Sanford L. Ingham's summability method and Riemann's hypothesis. (**51** #3079 (E **55** #7945))

Sharma, M. M. *See* **Chandra, Prem**, (**55** #10953)

Sherif, Soraya Absolute Tauberian constants for Cesàro means. (**45** #4013)

Stein, Charles *See* **Diaconis, Persi**, (**57** #14089)

Tanović-Miller, Naza On the multipliers of Cesàro summable sequences. (Serbo-Croatian summary) (**49** #9470)

Tzimbalario, Jean *See* **Jakimovski, Amnon; et al.**, (**50** #5530)

Varma, R. S. On the absolute Nörlund summability factors. (**58** #6818)

Warlimont, Richard Über die absolute Cesàro-Summierbarkeit konformäquivalenter Reihen. (**52** #711)
Über die starke Cesàro-Summierbarkeit konform-äquivalenter Reihen. (**58** #29573)
See also **Indlekofer, Karl-Heinz**, (**50** #13468)

40G10 Abel, Borel and power series methods

Borwein, David (*with* Rizvi, J. H.) Generalized strong summability of infinite series. **55** #926

Čelidze, M. V. A generalization of a certain theorem of O. Szász to the case of double series. (Russian. Georgian and English summaries) **54** #789

Frolich, Werner Einschliessungssätze für das abelsche Limitierungsverfahren bezüglich Konvergenzgeschwindigkeit und absoluter Konvergenz. (See Zbl **283** #40008)

Graffi, Sandro (*with* Grecchi, Vincenzo) Borel summability and indeterminacy of the Stieltjes moment problem: application to the anharmonic oscillators. **57** #13289

Grecchi, Vincenzo *See* **Graffi, Sandro**, **57** #13289

Gusev, A. N. Borel's methods of generalized summability of series. (Russian) (See RŽMat **1972** #5 B35)

Harbusch, Klaus Einschliessungssätze für verallgemeinerte Abel-Matrixverfahren. **56** #6184

Hillion, Pierre Borel summability and distribution. **55** #6058

Hoischen, Lothar Wachstumseigenschaften und Konvergenzfaktoren für verallgemeinerte Potenzreihenverfahren der Limitierung. **56** #16202

Ishiguro, Kazuo (*with* Meyer-König, Werner) Über das Verträglichkeitsproblem bei den Kreisverfahren der Limitierungstheorie. **52** #6244b
(*with* Meyer-König, Werner) Über das Verträglichkeitsproblem bei den singulären Taylorschen Limitierungsverfahren. **52** #6244a

Israpilov, R. B. A certain generalization of Borel's exponential method of summation. (Russian. English summary) **54** #3217

Khan, Mohammed M. R. On a product of (J,p_n)- and (S^*,ψ)-methods of summability. (Italian summary) **51** #10951

Kuttner, Brian Note on a scale of Abel-type summability methods. **58** #6820

Men′šov, D. E. A relationship between the convergence of sequences of partial sums of a series of numbers and its summability by Abel's method. (Russian) **56** #6185

Meyer-König, Werner *See* **Ishiguro, Kazuo**, **52** #6244a *and* **Ishiguro, Kazuo**, **52** #6244b

Mishra, Babban Prasad Theorems concerning infinite series on a scale of Abel type summability methods. **46** #9593
(*with* Singh, Dinesh) Summability factor on Abel type methods. (Italian summary) **58** #1823

Parameswaran, Mangalam R. Logarithmic means and summability by the circle methods. **52** #8721

Prouza, Ludvík On the weak Borel property of methods of summation. (Czech summary) **47** #5487

Rizvi, J. H. *See* **Borwein, David**, **55** #926

Rozengauz, M. M. Abel's second theorem. (Russian) **53** #6150

Singh, Dinesh *See* **Mishra, Babban Prasad**, **58** #1823

Yadav, Sarjoo Prasad On Borel-summability of Jacobi series. (Hindi. English summary) **54** #13370

Yang, Kuo Shêng A sufficient condition for Borel-type methods of summability. (Chinese summary) **53** #8718

Secondary classifications:

Borwein, David (*with* Rizvi, J. H.) On strong summability. (**47** #5485)
(*with* Smet, E.) Tauberian theorems for Borel-type methods of summability. (**50** #13964 (E **54** #13367))
(*with* Shawyer, Bruce L. R.) On functional Cesàro and Hölder methods of summability. (**58** #1814)
(*with* Watson, B.) Tauberian theorems on a scale of Abel-type summability methods. (**58** #17646)

Čelidze, V. G. The Abel summability of double series. (Russian. Georgian and English summaries) (**52** #8713)

Luh, Wolfgang Überkonvergenz bei Euler- und Borel-Verfahren. (**45** #511)

Maddox, Ivor J. Steinhaus type theorems for summability matrices. (**51** #1192)

Mel′nik, V. Ĭ. A Tauberian theorem for the Borel summability method. (Russian) (**45** #774)

Miškelevičius, A. The convergence and overconvergence of a certain Laplace-Stieltjes type integral. (Russian. Lithuanian and French summaries) (**45** #5672)

Rizvi, J. H. *See* **Borwein, David**, (**47** #5485)

Rusev, Pet″r K. Abel's theorem for Laguerre series. (Russian) (**55** #3368)

Schatte, Peter Die H_∞-Limitierbarkeit einer Klasse von Zahlenfolgen. (**50** #11397)

Shawyer, Bruce L. R. General absolute Borel-type methods. (**45** #769)
See also **Borwein, David**, (**58** #1814)

Smet, E. *See* **Borwein, David**, (**50** #13964 (E **54** #13367))

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40G99 None of the above, but in this section

Čelidze, V. G. ϕ-summability of series. (Russian. Georgian and English summaries) **50** #2744

Dardžanija, M. B. Summability of double integrals by Voronov's method. (Russian. Georgian and English summaries) **57** #3688

Deák, Jenő Notes on Dirichlet series with complex exponents. I. Summation of series satisfying the Miškelevičius condition. **51** #1198

Galić, Mihailo A class of summability methods and their application to generalized Fourier series. (Serbo-Croatian. English summary) **56** #915

The G_θ^κ-summability of some special series. (Serbo-Croatian. English summary) **58** #29574

Gluzdovskiĭ, V. V. A linear method for the summability of series. (Russian) **58** #29575

Grepačevskaja, L. V. Summability of arbitrary sequences by Riesz methods. (Russian) **53** #11261

Groetsch, C. W. Remarks on a generalization of the Lototsky summability method. (Italian summary) **46** #7760

Idel's, L. V. The summability of integrals by the Bernšteĭn-Rogosinski method. (Russian) **45** #4011

Iwiński, T. B. Some remarks on Toeplitz methods and continuity. **48** #759

Kogan, D. A. Generalization of a certain matrix convolution, and its application to Fourier series. (Russian) **52** #8722

Kuttner, Brian On Riemann summability of functions. **51** #6216

Maravić, Manojlo The *G*-summability of the expansion in eigenfunctions of the Laplace operator. (Serbo-Croatian. English summary) **56** #916

Martić, Branislav Certain investigations of a class of asymptotic series. (Serbo-Croatian. English summary) **46** #7761

Mihalin, G. O. Kernels of *K*-transformations of functions of class *C*. (Russian) **58** #12079

Mishra, Babban Prasad (*with* Singh, Dinesh) Summability factors on (A,λ) methods. **54** #13371

(*with* Singh, Dinesh) Some theorems on Abel type summability methods. (Italian summary) **57** #3689

Prasad, Kanhaiya (*with* Tripathi, Lal Mani) Absolute Riesz summability factors of a Fourier series. **56** #12699

Reimers, É. G. Representation of functions by number sequences. (Russian. Estonian and English summaries) **46** #7762

Sakata, Hiroshi On convexity theorems for Riesz means. **50** #829

Schaper, Knut On discontinuous Riesz means of integral order. **47** #9119

Schatte, Peter Ein Kriterium für die H_∞-Limitierbarkeit. **51** #1199

Singh, Dinesh *See* **Mishra, Babban Prasad, 54** #13371 *and* **Mishra, Babban Prasad, 57** #3689

Šul′gina, L. T. The preservation of the limit in Aitken transformations. (Russian) **46** #7763

Trebels, Walter On the approximation behavior of the Riesz means in $L^p(\mathbf{R}^n)$. **58** #29576

Tripathi, Lal Mani *See* **Prasad, Kanhaiya, 56** #12699

Tzimbalario, Jean Generalised Riesz typical means. **54** #790

Ugulava, D. K. A generalization of the de la Vallée Poussin summability method. (Russian) **57** #17076

Vichmann, F. A certain summability method for series. (Russian. English and loose Russian summaries) **53** #13922

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Gupta, Devendra (*with* Khoti, B. P.) On Riesz summability of a series of Bessel functions. (**49** #9527)

Gur′janova, K. N. (*with* Kozmanova, A. A.) A certain method of summation of a series for a metaharmonic function. (Russian) (**54** #569)

Khoti, B. P. *See* **Gupta, Devendra,** (**49** #9527)

Kozmanova, A. A. *See* **Gur′janova, K. N.,** (**54** #569)

van de Lune, Jan ★The truncated average limit and some of its applications in analytic number theory. (**57** #248)

Musielak, Julian (*with* Waszak, Aleksander) On a property of some methods of summability. (**47** #795)

Parameswaran, Mangalam R. Some Tauberian theorems related to the logarithmic methods of summability. (Serbo-Croatian summary) (**57** #10306)

Segal, Sanford L. *See* **Erdős, Paul,** (**58** #549)

Waszak, Aleksander Orlicz spaces connected with strong summability. II. On an equisplittable family of purely atomic measures. (Polish and Russian summaries) (**47** #799)

Orlicz spaces connected with strong summability. I. Linear functionals in spaces of strongly summable functions. (**47** #798)

Orlicz spaces connected with strong summability. III. On strong $(\mathfrak{M},\phi)$-summability. (**47** #800)

See also **Musielak, Julian,** (**47** #795)

40H05 Functional analytic methods in summability

Amson, J. C. Multilinear and polynomial transformations of bounded-sequence spaces. **46** #4061

Bakusova, S. M. Consistency of linear operators in a sequence space. (Russian) **53** #8719

Balser, Werner Über Abschnittslimitierbarkeit. **55** #6059

Beekmann, Wolfgang Über einige limitierungstheoretische Invarianten. **54** #5670

Bennett, Grahame A representation theorem for summability domains. **45** #776

The gliding humps technique for *FK*-spaces. **45** #5623

(*with* Sember, J. J.; Wilansky, Albert) Sections of sequences in matrix domains. **55** #3600

Bobillo Guerrero, Pablo On the product of sequences and series. (Spanish) **48** #4572 (E **50** #5263)

Boël, Jacques (*with* Duhoux, Michel) ★Sommabilité dans les espaces localement convexes. **53** #3544

(*with* Duhoux, Michel) Sommabilité dans les espaces localement convexes. **46** #7764

Brown, Herbert I. (*with* Kerr, D. R.; Stratton, Howard H.) The structure of $B[c]$ extensions of the concept of conull matrix. **46** #4062 (E **46** #4063)

(*with* Kerr, D. R.; Stratton, Howard H.) Corrections to: “The structure of and extensions of the concept of conull matrix”. **46** #4063

Butzmann, Heinz-Peter Über die *c*-Reflexivität von $C_c(X)$. **46** #7765

Chandrasekhara Rao, K. On entire methods of summation. (Not reviewed)

Das, G. Banach and other limits. **49** #924

DeVos, Robert θ maps between *FK* spaces and summability. **47** #5488

Duhoux, Michel *See* **Boël, Jacques, 46** #7764 *and* **Boël, Jacques, 53** #3544

Duran, J. Peter Almost convergence, summability and ergodicity. **49** #5636

Erdős, Paul (*with* Magidor, Menachem) A note on regular methods of summability the Banach-Saks property. **55** #3601

Erwe, Friedhelm Limitierung beschränkter Folgen reeler Zahlen. **51** #6217

Flachsmeyer, Jürgen (*with* Terpe, Frank) On summation on locally compact spa **54** #10923

Garling, D. J. H. (*with* Wilansky, Albert) On a summability theorem of Berg, Crawf and Whitley. **45** #4014

Gluzdovskiĭ, V. V. An addition to the conditions for the practicability of theorems on convergence of sequences of linear functionals of bounded functions that belong $(x_0, E_1, \ldots, E_k, \ldots)$. (Russian) **58** #29577

Hajduković, Dimitrije Almost convergence of vector sequences. **52** #3791

Hensz, Ewa On the perfectness of the Cesàro, Borel and Abel limitation methods sequences. (Russian summary) **52** #14737

Jakimovski, Amnon (*with* Russell, Dennis C.) Best order conditions in linear spac with applications to limitation, inclusion, and high indices theorems for ordinary a absolute Riesz means. **54** #10924 (EA **58**)

Jürimäe, E. Sets of perfectness for methods that preserve convergence. (Russian. Estonian and English summaries) **51** #6218

Kerr, D. R. *See* **Brown, Herbert I.; et al., 46** #4062 (E **46** #4063) *and* **Brown, Herb I.; et al., 46** #4063

Kotkowski, Bogdan (*with* Magdziarz, Janusz; Waszak, Aleksander) Some properties regular methods of summability. **57** #10307

Kuan, Shêng Yü Some invariant properties on summability domains. **56** #6186

Kurtz, J. C. Almost convergence in Banach spaces. **47** #7275

Lascarides, Constantine G. A study of certain sequence spaces of Maddox and generalization of a theorem of Iyer. **46** #5890 (E **47** #5489)

Correction to: “A study of certain sequence spaces of Maddox and a generalization of a theorem of Iyer”. **47** #5489

Lazić, Milivoje G. Some remarks on the structure of the applicability domains of matr operators and methods. **50** #10600

Macphail, Moray S. (*with* Wilansky, Albert) Linear functionals and summability invariants. **50** #13973

Summability invariants. **55** #10900

Maddox, Ivor J. Schur's theorem for operators. **56** #9134

(*with* Roles, J. W.) Absolute convexity in spaces of strongly summable sequenc **54** #5671

Magdziarz, Janusz *See* **Kotkowski, Bogdan; et al., 57** #10307

Magidor, Menachem *See* **Erdős, Paul, 55** #3601

Makarov, A. V. The structure of the field of effectiveness of a numerical summabili matrix over a Banach space with a basis. (Russian) **58** #23244

Nanda, Sudarsan Matrix transformations and almost convergence. **55** #13123

(*with* Nayak, K. C.) Some new sequence spaces. **58** #29578

Nayak, K. C. *See* **Nanda, Sudarsan, 58** #29578

Nikišin, E. M. Rearrangements of series in L_p. (Russian) **48** #9172

Pap, Endre A generalization of the diagonal theorem on a block-matrix. **51** #3750

Pečerskiĭ, D. V. Rearrangements of the terms in function series. (Russian) **47** #9120

Petersen, Gordon M. The algebra of bounded sequences as factor sequences. **47** #91

Roles, J. W. *See* **Maddox, Ivor J., 54** #5671

Rubinov, A. M. The supports of certain measures connected with Markov operator (Russian) **49** #925

Rudakov, S. A. Inclusion relations between Knopp cores and *s*-convergence core (Russian. Estonian and English summaries) **52** #14738

Russell, Dennis C. *See* **Jakimovski, Amnon, 54** #10924 (EA **58**)

Sember, J. J. *See* **Bennett, Grahame; et al., 55** #3600

Sharma, N. K. Spectra of conservative matrices. **46** #5891

Banach algebra of conservative Hausdorff matrices. **54** #10925

Skvorcova, M. G. Multiplicators and summability factors. (Russian. Estonian and German summaries) **45** #777

Snyder, Andrew K. (*with* Wilansky, Albert) Inclusion theorems and semiconservati *FK* spaces. **46** #9594

Somasundaram, D. Non-Archimedian (FK)-spaces. **48** #11846

Stieglitz, Michael Durch Matrizenfolgen erklärte Konvergenzbegriffe und ihre Wirkfelder. **50** #830

(*with* Tietz, Hubert) Matrixtransformationen in den Raum der quasikonvexe Folgen. **56** #9135

(*with* Tietz, Hubert) Matrixtransformationen quasikonvexer Folgen. **56** #917

Stratton, Howard H. *See* **Brown, Herbert I.; et al., 46** #4062 (E **46** #4063) *a* **Brown, Herbert I.; et al., 46** #4063

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Waszak, Aleksander *See* **Kotkowski, Bogdan; et al., 57** #10307

Wee, Polly Matrix transformations in $n(\phi)$ and $m(\phi)$ spaces. **56** #9136

Wenger, Robert B. The fine spectra of the Hölder summability operators. **56** #3494

Wilansky, Albert *See* **Garling, D. J. H., 45** #4014; **Snyder, Andrew K., 46** #959 **Macphail, Moray S., 50** #13973 *and* **Bennett, Grahame; et al., 55** #3600

Secondary classifications:

Baernstein, Albert, II On reflexivity and summability. (46 #4174)

Bennett, Grahame A new class of sequence spaces with applications in summability theory. (49 #9585)

Brauer, George Summability and Fourier analysis. (47 #706)

DeVos, Robert (*with* Hartmann, Frederick W.) Sequences of bounded summability domains. (58 #1812)

Fricke, Gerd H. A note on strictly cyclic shifts on l_p. (58 #7188)

Goes, Günther On a Tauberian theorem for sequences with gaps and on Fourier series with gaps. (49 #922)

Summen von *FK*-Räumen. Funktionale Abschnittskonvergenz und Umkehrsätze. (50 #14165)

Hartmann, Frederick W. *See* **DeVos, Robert**, (58 #1812)

Ladyženskiĭ, L. A. A certain lemma of Schur. (Russian. Latvian and English summaries) (47 #9345)

Laitoch, Miroslav Linear sequences. (Czech. German summary) (47 #771)

Leibowitz, Gerald M. Discrete Hausdorff transformations. (47 #4057)

Maddox, Ivor J. ★Elements of functional analysis. (52 #11515)

(*with* Willey, Michael A. L.) Continuous operators on paranormed spaces and matrix transformations. (50 #7988)

Ørno, Peter A note on unconditionally converging series in L_p. (56 #16359)

Pittnauer, Franz Konstruktion und Berechnung von Stieltjes-Transformierten mit umhüllenden asymptotischen Entwicklungen. (52 #14312)

Shawyer, Bruce L. R. Maximum modulus theorems and Schwarz lemmata for sequence spaces. II. (58 #2288)

Täht, T. Multipliers of summability bases, and summability factors. (Russian. Estonian and English summaries) (55 #1032)

Multipliers and complementary spaces of *BK*-spaces. (Russian. Estonian and English summaries) (55 #1033)

Tonne, Philip C. Matrix representations for linear transformations on analytic sequences. (48 #2722)

Tzimbalario, Jean Some Mazur-Orlicz-Brudno like theorems. (48 #9343)

Ugulava, D. K. Certain linear approximation methods in linear normed spaces. (Russian. Georgian and English summaries) (45 #9045)

Willey, Michael A. L. On sequences of bounded linear functionals with applications to matrix transformations. (48 #6894)

See also **Maddox, Ivor J.**, (50 #7988)

40J05 Summability in abstract structures [See also 43A55.]

Adrian, Ocneanu On a criterion concerning the preservation of the convergence of a series under a permutation in a Banach space. (Romanian. English summary) 56 #918

Antosik, Piotr A diagonal theorem for nonnegative matrices and equicontinuous sequences of mappings. (Russian summary) 56 #919

Baric, L. W. The chi function in generalized summability. 46 #7766

A characterization of 1-1 matrices. 49 #7646

Çakar, Ö. On matrix transformations of sequence spaces defined in an incomplete space. (Turkish summary) 50 #831

Chandrasekhara Rao, K. Matrix transformations of some sequence spaces. III. (Italian summary) 46 #5892

DeVos, Robert Subsequences and rearrangements of sequences in FK spaces. 55 #927 (E 57 #7108)

Flachsmeyer, Jürgen *See* **Terpe, Frank**, 53 #3545

Holščevnikova, N. N. Limits of subsequences of sequences obtained from a given sequence by means of a regular transformation. (Russian) 51 #13516

Limits of indeterminacies of regular transformations in topological linear spaces. (Russian) 53 #1090

Jakimovski, Amnon (*with* Livne, Avishai) An extension of Brudno-Mazur-Orlicz theorem. 46 #4064

Lazić, Milivoje G. Functional transformations of sequences. II. (Russian) 57 #6945

Livne, Avishai *See* **Jakimovski, Amnon**, 46 #4064

Maddox, Ivor J. Matrix maps of bounded sequences in a Banach space. 56 #6187

Mah, Peter F. Matrix summability in amenable semigroups. 47 #2228

Menihes, L. D. Summability in topological linear spaces. (Russian) 53 #6151

Niechajewicz, Romana A theorem on subseries. (Russian summary) 53 #1091

Pečerskiĭ, D. V. A theorem on projections of permuted series with terms belonging to L_p. 55 #10901

Ščerbakov, A. A. The nucleus of a sequence that is obtained from a given sequence by a regular transformation. (Russian) 58 #1824

Schempp, Walter Zur Lototsky-Transformation über kompakten Räumen von Wahrscheinlichkeitsmassen. (English summary) 50 #5271

Siddiqi, A. H. Invariant means and almost convergence in non-Archimedean analysis. 52 #14739

Somasundaram, D. Sequence to series transformations in *F*-spaces. 53 #1092

Some properties of *T*-matrices over non-archimedian fields. 50 #2746

Stieglitz, Michael Matrixtransformationen von unvollständigen Folgenräumen. 49 #926

Szilágyi, Miklós The summability of the partial functions with values in a topological Ω-group. 48 #760

Talaljan, F. A. The summability of sequences in normed spaces. (Russian. Armenian and English summaries) 56 #3495

Terpe, Frank (*with* Flachsmeyer, Jürgen) A certain aspect of compactification theory and measure theory in summability problems. (Russian) 53 #3545

Van der Poorten, Alfred J. A note on recurrence sequences. 52 #14740

Vera, G. On a general notion of summability. (Spanish) 54 #10926

Wood, Bruce Consistency and inclusion results for Toeplitz matrices of bounded linear operators. 46 #9595

Žavoronkov, V. D. Conull and coregular transformations. (Russian) 58 #12080

Secondary classifications:

Abel, M. A. The invertibility of sequences and infinite matrices. (Russian. Estonian and English summaries) (46 #7906)

Atalla, Robert E. Generalized averaging operators and matrix summability. (47 #2422)

Bakusova, S. M. Analogues of the principle of singularity fixation and of the Banach-Steinhaus theorem in sequence spaces. (Russian) (51 #8789)

See also **Melencov, A. A.**, (48 #11990)

Bennett, Grahame (*with* Kalton, Nigel J.) *FK*-spaces containing c_0. (46 #9695 (E 47 #2312))

Brown, Herbert I. (*with* Cho, Tae Geun) Subalgebras of $B[c]$. (48 #2790)

Buntinas, Martin Convergent and bounded Cesàro sections in FK-spaces. (45 #4088)

Butzer, Paul L. (*with* Westphal, Ursula) Ein Operatorenkalkül für das approximationstheoretische Verhalten des Ergodensatzes im Mittel. (52 #8968)

Çakar, Ö. A note on the matrix transformations of L_r and L_s defined in an incomplete space. (Turkish summary) (58 #7187)

Čeresiz, V. M. The weak completeness of a space that is conjugate to a convergence space. (Russian) (45 #4089)

Chinnadurai, P. P. *See* **Somasundaram, D.**, (58 #29556)

Cho, Tae Geun *See* **Brown, Herbert I.**, (48 #2790)

Crone, Lawrence A characterization of matrix operators on l^2. (45 #2503)

Duran, J. Peter Strongly regular matrices, almost-convergence, and Banach limits. (46 #9689)

Isler, Romano Sugli spazi di convergenza deducibili da una famiglia di successioni. (English summary) (53 #6479)

Jakimovski, Amnon (*with* Russell, Dennis C.) Matrix mappings between *BK*-spaces. (47 #7383)

Kalton, Nigel J. On summability domains. (47 #9236)

See also **Bennett, Grahame**, (46 #9695 (E 47 #2312))

Kašin, B. S. Unconditional convergence in the space L_1. (Russian) (52 #6398)

Katznelson, Yitzhak (*with* McGehee, O. Carruth) Conditionally convergent series in R^∞. (50 #945)

Lazić, Milivoje G. Sur la perfection des procédés continus permanents. (46 #2394)

Leviatan, Dany (*with* Ramanujan, Melapalayam S.) A generalization of the mean ergodic theorem. (46 #2465)

Loone, L. The cores of an element of a separable locally convex space. (Russian. Estonian and English summaries) (51 #11044)

The core bounded elements in a locally convex space. (Russian. Estonian and English summaries) (51 #11045)

Knopp's core and an almost-convergence core in the space m. (Russian. Estonian and English summaries) (51 #11046)

Knopp's core and an almost-convergence core in the space m. II. (Russian. Estonian and English summaries) (52 #1256)

McCabe, T. F. A note on contractive selfmaps of l^∞. (52 #3922)

McGehee, O. Carruth *See* **Katznelson, Yitzhak**, (50 #945)

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Ramanujan, Melapalayam S. *See* **Leviatan, Dany**, (46 #2465)

Rhoades, Billy E. (*with* Wilansky, Albert) Some commutants in $B(c)$ which are almost matrices. (49 #1211)

Rudakov, S. A. One form of weakly converging sequences, and their summability in normed spaces. (Russian) (58 #30038)

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Westphal, Ursula *See* **Butzer, Paul L.**, (52 #8968)

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See also **Rhoades, Billy E.**, (49 #1211)

41–XX APPROXIMATIONS AND EXPANSIONS [For all approximation theory in the complex domain, see 30A80 and 30A82; for all trigonometric approximation and interpolation, see 42A08, 42A12.]

(Askey, Richard A.) *See* **Problems: Constructive theory of functions**, 52 #6245

Braess, Dietrich (*with* Brink-Spalink, Jan; Schaback, Robert) ★Eine Bibliographie zur nichtlinearen Approximationstheorie. **50** #7890
Brink-Spalink, Jan *See* **Braess, Dietrich; et al., 50** #7890
(DeVore, Ronald A.) *See* **Problems: Constructive theory of functions, 52** #6245
(Freud, Géza) *See* **Problems: Constructive theory of functions, 52** #6245
(Musielak, Julian) *See* **Problems: Constructive theory of functions, 52** #6245
(Peetre, Jaak) *See* **Problems: Constructive theory of functions, 52** #6245
(Popoviciu, Tiberiu) *See* **Problems: Constructive theory of functions, 52** #6245
Schaback, Robert *See* **Braess, Dietrich; et al., 50** #7890
Approximation theory *See* **Problems: Constructive theory of functions, 52** #6245
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  Nonlinear approximation theory *See* **Braess, Dietrich; et al., 50** #7890
Constructive theory of functions *See* **Problems: Constructive theory of functions, 52** #6245
Problems:
  Approximation theory *See* **Problems: Constructive theory of functions, 52** #6245
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Secondary classifications:

Gragg, William B. (*with* Johnson, G. D.) The Laurent-Padé table. (**53** #14862)
Gustafson, Sven-Åke On computational applications of the theory of moment problems. (**49** #11767)
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Young, L. C. An approximation algorithm for n-th derivatives and its applications to analysis and to stochastic integrals. (**53** #1914)

41–01 Elementary exposition (collegiate level)

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Dzjadik, V. K. ★Введение в теорию равномерного приближения функций полиномами. (Russian) [Introduction to the theory of uniform approximation of functions by polynomials] **58** #29579
(Gahov, F. D.) *See* **Tureckiĭ, A. H., 57** #3690
(Janenko, N. N.) *See* **Laurent, Pierre-Jean**, (Not reviewed)
Krabs, Werner ★Optimierung und Approximation. **58** #17652
Kühner, Ernst (*with* Lesky, Peter) ★Grundlagen der Funktionalanalysis und Approximationstheorie. **57** #6946
(Kvasov, B. I.) *See* **Laurent, Pierre-Jean**, (Not reviewed)
Laurent, Pierre-Jean ★Approximation et optimisation. **57** #6947
  ★Аппроксимация и оптимизация. (Russian) [Approximation and optimization] (Not reviewed)
Lesky, Peter *See* **Kühner, Ernst, 57** #6946
Mills, T. M. An introduction to analysis by Lagrange interpolation. **56** #3496
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(Rubinšteĭn, G. Š.) *See* **Laurent, Pierre-Jean**, (Not reviewed)
Singh, Rajbeer *See* **Mishra, B. N., 46** #7767
(Šmyrev, V. I.) *See* **Laurent, Pierre-Jean**, (Not reviewed)
Tureckiĭ, A. H. ★Теория интерполирования в задачах. Часть 2. (Russian) [Theory of interpolation in problem form. Part 2] **57** #3690
(Zav′jalov, Ju. S.) *See* **Laurent, Pierre-Jean**, (Not reviewed)
Zinger, M. Ja. ★Элементы дифференциальной теории чебышевских приближений. (Russian) [Elements of the differential theory of Čebyšev approximations] **58** #6821
(Zvjagina, R. A.) *See* **Laurent, Pierre-Jean**, (Not reviewed)

Secondary classifications:

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Butzer, Paul L. (*with* Nessel, Rolf Joachim) ★Fourier analysis and approximation. (**58** #23312)
Gjunter, N. M. (*with* Kuz′min, R. O.) ★Aufgabensammlung zur höheren Mathematik. Band II. (**58** #26628)
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(Boman, Jan) *See* **Shapiro, Harold S., 55** #10902
Braess, Dietrich Nonlinear approximation. **55** #928
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  See also **Problems: Linear operators and approximation, 51** #6219
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Collatz, Lothar (*with* Krabs, Werner) ★Approximationstheorie. Tschebyscheffsche Approximation mit Anwendungen. **56** #3497
(Cooper, Jacob Lionel Bakst) *See* **Problems: Linear operators and approximation, 51** #6219
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(Deutsch, Frank) *See* **Problems: Linear operators and approximation, 51** #6219
(DeVore, Ronald A.) *See* **Problems: Linear operators and approximation, 51** #6219
(Diamond, Ainsley) *See* **Sansone, G., 54** #10927
(Dorroh, J. R.) *See* **Problems: Linear operators and approximation, 51** #6219
(Egorov, V. A.) *See* **Karlin, Samuel; et al., 56** #920
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(Freud, Géza) *See* **Problems: Linear operators and approximation, 51** #6219
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Jerome, Joseph W. Topics in multivariate approximation theory. **48** #9173
Karlin, Samuel (*with* Studden, William J.) ★Чебышевские системы и их применение анализе и статистике. (Russian) [Čebyšev systems and their applications in analys and statistics] **56** #920
Kershaw, Donald Recent results in approximation theory. **57** #17077
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Krabs, Werner *See* **Collatz, Lothar, 56** #3497
(Lehmann, Reinhard) *See* **Mihlin, S. G., 58** #29580
Lewis, James T. Approximation with convex constraints. **48** #4573
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Locher, Franz (*with* Zeller, Karl) Approximation auf Gitterpunkten. **51** #3751
Lorentz, Georg Gunther ★Problems in approximation theory. **57** #6948
  See also **Problems: Linear operators and approximation, 51** #6219
(Melas, V. B.) *See* **Karlin, Samuel; et al., 56** #920
(Micchelli, Charles A.) *See* **Problems: Linear operators and approximation, 51** #6219
Mihlin, S. G. ★Approximation auf dem kubischen Gitter. **58** #29580
(Névai, P.) *See* **Lorentz, Georg Gunther, 57** #6948
(Nikol′skiĭ, S. M.) *See* **Problems: Linear operators and approximation, 51** #6219
Penkov, Boyan I. (*with* Sendov, Blagovest H.) Hausdorff metric and its applications **51** #13517
(Prößdorf, Siegfried) *See* **Mihlin, S. G., 58** #29580
(Rivlin, Theodore J.) *See* **Problems: Linear operators and approximation, 51** #6219
(Rozanov, Ju. A.) *See* **Problems: Linear operators and approximation, 51** #6219
Rvačov, V. L. *See* **Litvin, O. M., 50** #10601
Sansone, G. ★Orthogonal functions. **54** #10927
(Schoenberg, Isaac Jacob) *See* **Problems: Linear operators and approximation, 51** #621
(Sedunov, E. V.) *See* **Karlin, Samuel; et al., 56** #920
(Segal, Irving Ezra) *See* **Problems: Linear operators and approximation, 51** #6219
Sendov, Blagovest H. *See* **Penkov, Boyan I., 51** #13517
Shapiro, Harold S. ★Smoothing and approximation of functions. **54** #791
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Tihomirov, V. M. ★Некоторые вопросы теории приближений. (Russian) [Some questions in approximation theory] **58** #6822
Turán, Pál On some open problems of approximation theory. (Hungarian) **56** #921
(Zaanen, A. C.) *See* **Problems: Linear operators and approximation, 51** #6219
Zeller, Karl *See* **Locher, Franz, 51** #3751
Problems:
  Linear operators and approximation New and unsolved problems. **51** #6219
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Bierstedt, Klaus-Dieter Some generalizations of the Weierstrass and Stone-Weierstras theorems. (**57** #13456)
Collatz, Lothar Approximationstheorie und Anwendungen. (**51** #9538)
Cuculescu, Ion ★Analiza numerică. (Romanian) [Numerical analysis] (**54** #11723)
Holmes, Richard B. ★A course on optimization and best approximation. (**54** #8381)
Motornyĭ, V. P. Some extremal problems in the theory of quadratures and approximation of functions. (Russian) (**53** #8750)
Stummel, Friedrich ★Approximation methods in analysis. (**57** #7941)

41–03 Historical

Gusak, A. A. ★Теория приближения функций. Исторический очерк. (Russian) [Theory of the approximation of functions. A historical sketch] **54** #5672

Secondary classifications:

(Bernstein, Serge) *See* **Ibragimov, I. I.**, (**52** #5306)
(Fejér, L.) *See* **Szegő, Gábor**, (**52** #5325)
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41–04 Explicit machine computation and programs (not the theory o computation or programming)

Secondary classifications:

Gordon, William J. (*with* Riesenfeld, Richard F.) Bernstein-Bézier methods for th computer-aided design of free-form curves and surfaces. (**50** #6108)
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41–06 Collections of papers; proceedings of conferences

(Alexits, Gyorgy) *See* **Proceedings: Conference on Constructive Theory of Functions (Approximation Theory)**, 51 #8677

(Berens, Hubert) *See* **Approximation theory**, 48 #761

(Besov, O. V.) *See* **Theory of functions and its applications**, 51 #13518

(Böhmer, Klaus W. A.) *See* **Spline-Funktionen**, 49 #9478

(Cheney, Elliot W.) *See* **Approximation theory**, 48 #761

(Chui, Charles K.) *See* **Approximation theory**, 54 #5673

(Ciesielski, Zbigniew) *See* **Approximation theory**, 56 #922 (EA 55/56)

(Collatz, Lothar) *See* **Numerische Methoden der Approximationstheorie**, 49 #5637

(Dzjadik, V. K.) *See* **Theory of the approximation of functions, and its applications**, 50 #13975 *and* **Questions in the theory of approximation of functions and its applications**, 58 #29581

(Gagaev, B. M.) *See* **Application of functional analysis to approximate calculations**, 58 #23245

(Gavriljuk, V. T.) *See* **Theory of the approximation of functions, and its applications**, 50 #13975

(Handscomb, David C.) *See* **Multivariate approximation**, 58 #29584

(Karlin, Samuel) *See* **Studies in spline functions and approximation theory**, 52 #14741

(Kudrjavcev, L. D.) *See* **Theory of functions and its applications**, 51 #13518

(Law, Alan G.) *See* **Theory of approximation, with applications**, 52 #14742

(Lorentz, Georg Gunther) *See* **Approximation theory**, 48 #761; **Collection: Lorentz, Georg Gunther**, 50 #7891; **Collection: Lorentz, Georg Gunther**, 50 #13974 *and* **Approximation theory**, 54 #5673

(Meinardus, Günter) *See* **Numerische Methoden der Approximationstheorie**, 49 #5637 *and* **Spline-Funktionen**, 49 #9478

(Micchelli, Charles A.) *See* **Studies in spline functions and approximation theory**, 52 #14741 *and* **Optimal estimation in approximation theory**, 56 #3498

(Musielak, Julian) *See* **Approximation theory**, 56 #922 (EA 55/56)

(Nikol′skiĭ, S. M.) *See* **Theory of functions and its applications**, 51 #13518

(Nikol′skiĭ, V. N.) *See* **Application of functional analysis in approximation theory**, 58 #23246

(Penkov, Boyan I.) *See* **Constructive theory of functions**, 50 #5272

(Pinkus, Allan) *See* **Studies in spline functions and approximation theory**, 52 #14741

(Pontrjagin, L. S.) *See* **Theory of functions and its applications**, 51 #13518

(Rivlin, Theodore J.) *See* **Optimal estimation in approximation theory**, 56 #3498

(Sahney, Badri N.) *See* **Theory of approximation, with applications**, 52 #14742

(Schaback, Robert) *See* **Approximation theory**, 58 #23247

(Schempp, Walter) *See* **Spline-Funktionen**, 49 #9478 *and* **Constructive theory of functions of several variables**, 57 #6949

(Scherer, K.) *See* **Approximation theory**, 58 #23247

(Schmidt, Eckard) *See* **Theory of approximation, with applications**, 52 #14742

(Schoenberg, Isaac Jacob) *See* **Studies in spline functions and approximation theory**, 52 #14741

(Schumaker, L. L.) *See* **Approximation theory**, 48 #761 *and* **Approximation theory**, 54 #5673

(Stečkin, S. B.) *See* **Proceedings: Conference on Constructive Theory of Functions (Approximation Theory)**, 51 #8677; **Approximation of functions and operators**, 52 #1090 *and* **Theory of the approximation of functions**, 58 #29582

(Teljakovskiĭ, S. A.) *See* **Theory of the approximation of functions**, 58 #29582

(Tihomirov, N. B.) *See* **Application of functional analysis in approximation theory**, 58 #1825

(Vačov, Dimitir K.) *See* **Constructive theory of functions**, 50 #5272

(Volkov, E. A.) *See* **Theory of functions and its applications**, 51 #13518

(Zeller, Karl) *See* **Constructive theory of functions of several variables**, 57 #6949

(Zinger, M. Ja.) *See* **Uniform approximations and the moment problem**, 58 #29583

Application of functional analysis to approximate calculations ★Приложение функционального анализа к приближенным вычислениям. (Russian) [Application of functional analysis to approximate calculations] **58** #23245

Application of functional analysis in approximation theory ★Применение функционального анализа в теории приближений. Вып. 1. (Russian) [Application of functional analysis in approximation theory. No. 1] **48** #2632

★Применение функционального анализа в теории приближений. Вып. 5. (Russian) [Application of functional analysis in approximation theory. No. 5] **58** #23246

★Применение функционального анализа в теории приближений. (Russian) [Application of functional analysis in approximation theory] **58** #1825

Approximation theory *See* **Theory of approximation, with applications**, 52 #14742

Approximation *See* **Uniform approximations and the moment problem**, 58 #29583

Approximation of functions *See* **Theory of the approximation of functions, and its applications**, 50 #13975 *and* **Questions in the theory of approximation of functions and its applications**, 58 #29581

Approximation of functions and operators ★Приближение функций и операторов. (Russian) [Approximation of functions and operators] **52** #1090

Approximation theory ★Approximation theory. **48** #761

★Approximation theory. Proceedings of the Conference held at the Institute of Mathematics of the Adam Mickiewicz University, Poznań, 22–26 August, 1972. **56** #922 (EA 55/56)

★Approximation theory. II. **54** #5673

★Approximation theory. **58** #23247

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Approximationstheorie ★Zwei Kapitel aus der Approximationstheorie. **52** #14743

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Birthday:

Lorentz, Georg Gunther *See* **Collection: Lorentz, Georg Gunther**, 50 #7891 *and* **Collection: Lorentz, Georg Gunther**, 50 #13974

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Collection:

Lorentz, Georg Gunther ★{Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday. III}. **50** #7891

★{Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday. IV}. **50** #13974

Nikol′skiĭ, S. M. *See* **Theory of functions and its applications**, 51 #13518

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Constructive Theory of Functions of Several Variables *See* **Constructive theory of functions of several variables**, 57 #6949

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Constructive theory of functions ★Конструктивная теория функций. (Russian) [Constructive theory of functions] **50** #5272

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Constructive theory of functions of several variables ★Constructive theory of functions of several variables. **57** #6949

Durham *See* **Multivariate approximation**, 58 #29584

Forschungsberichte des Landes Nordrhein-Westfalen *See* **Approximationstheorie**, 52 #14743

Freudenstadt *See* **Optimal estimation in approximation theory**, 56 #3498

Functional analysis *See* **Application of functional analysis in approximation theory**, 48 #2632; **Application of functional analysis in approximation theory**, 58 #1825; **Application of functional analysis to approximate calculations**, 58 #23245 *and* **Application of functional analysis in approximation theory**, 58 #23246

Functions of several variables *See* **Constructive theory of functions of several variables**, 57 #6949

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Moment problem *See* **Uniform approximations and the moment problem**, 58 #29583

Multivariate approximation ★Multivariate approximation. **58** #29584

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Oberwolfach *See* **Constructive theory of functions of several variables**, 57 #6949

Optimal estimation in approximation theory ★Optimal estimation in approximation theory. **56** #3498

Poznań *See* **Approximation theory**, 56 #922 (EA 55/56)

Proceedings:

Conference on Constructive Theory of Functions (Approximation Theory) ★Proceedings of the Conference on Constructive Theory of Functions (Approximation Theory). **51** #8677

Questions in the theory of approximation of functions and its applications ★Вопросы теории приближения функций и ее приложений. (Russian) [Questions in the theory of approximation of functions and its applications] **58** #29581

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Spline-Funktionen ★Spline-Funktionen. **49** #9478

Studies in spline functions and approximation theory ★Studies in spline functions and approximation theory. **52** #14741

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Multivariate Approximation *See* **Multivariate approximation**, 58 #29584

Optimal Estimation in Approximation Theory *See* **Optimal estimation in approximation theory**, 56 #3498

Spline Functions and Approximation Theory *See* **Spline functions and approximation theory**, 49 #9477

Tagung:

Nümerische Methoden der Approximationstheorie *See* **Numerische Methoden der Approximationstheorie**, 49 #5637

Spline-Funktionen *See* **Spline-Funktionen**, 49 #9478

Theory of approximation, with applications ★Theory of approximation, with applications. **52** #14742

Theory of the approximation of functions ★Теория приближения функций. (Russian) [The theory of the approximation of functions] **58** #29582

Theory of the approximation of functions, and its applications ★Теория приближения функций и ее приложения. (Russian) [Theory of the approximation of functions, and its applications] **50** #13975

Theory of functions and its applications ★Теория функций и ее приложения. (Russian) [Theory of functions and its applications] **51** #13518

Trudy Mat. Inst. Steklov. *See* **Approximation of functions and operators**, 52 #1090

Uniform approximations and the moment problem ★Равномерные приближения и проблема моментов. (Russian) [Uniform approximations and the moment problem] **58** #29583

Secondary classifications:

(Abilov, V. A.) *See* **Functional analysis, theory of functions, and their applications,** (57 #3805)
(Beckenbach, Edwin F.) *See* **General inequalities,** (57 #15806)
(Butzer, Paul L.) *See* **Linear operators and approximation,** (50 #5498)
(Collatz, Lothar) *See* **Iterationsverfahren, Numerische Mathematik, Approximationstheorie,** (50 #8908)
(Gagaev, B. M.) *See* **Orthogonal polynomial expansion,** (58 #29733)
(Garnir, Henry G.) *See* **Functional analysis and its applications,** (49 #11187)
(Gehtman, M. M.) *See* **Functional analysis, theory of functions, and their applications,** (57 #3805)
(Jones, William B.) *See* **Proceedings: International Conference on Padé Approximants, Continued Fractions and Related Topics,** (48 #5775)
(Kahane, Jean-Pierre) *See* **Linear operators and approximation,** (50 #5498)
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Staffans, Olof J. Positive definite measures with applications to a Volterra equ (**56** #16289)

42–01 Elementary exposition (collegiate level)

Baker, J. E. *See* **Gowar, N. W.**, **50** #5321

Benedek, Agnes Ilona (*with* Murphy, Eduardo Ramon; Panzone, Rafael) ★Cues del análisis de Fourier. (Spanish) [Questions of Fourier Analysis] **57** #988

Burkill, H. The periods of a periodic function. **50** #2782

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Charris Castañeda, Jairo A. *See* **Bustoz, Joaquin**, **52** #14795

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Casanova, Gaston ★Les séries mathématiques. (**50** #5254)

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(Dhombres, N.) *See* **Rudin, Walter**, (**52** #10292)

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Hönig, Chaim Samuel ★Análise funcional e o problema de Sturm-Liouville. (Portuguese) [Functional analysis and the Sturm-Liouville problem] (**55** #8727

Rudin, Walter ★Real and complex analysis. (**49** #8783)
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42–02 Advanced exposition (research surveys, etc.)

Balašov, L. A. (*with* Rubinšteĭn, A. I.) Series in the Walsh system, and their generalizations. (Russian) **51** #6258
Córdoba, Antonio Fourier analysis and complex variable. (Spanish) **57** #13336
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42–03 Historical

Dieudonné, Jean A. History of harmonic analysis. (Russian) **58** #1937
Fefferman, Charles L. (*with* Kahane, Jean-Pierre; Stein, Elias M.) The scientific achievements of Antoni Zygmund. (Polish) **55** #6094
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42–04 Explicit machine computation and programs (not the theory of computation or programming)

Secondary classifications:

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42–06 Collections of papers; proceedings of conferences

(Ash, J. Marshall) *See* **Studies in harmonic analysis, 56** #946
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Sunouchi, Gen-ichirô ★{Collection of articles dedicated to Gen-ichirô Sunouchi on his sixtieth birthday}. **48** #777
Conference:
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(Akutowicz, Edwin J.) *See* **L'analyse harmonique dans le domaine complexe**, (**51** #5223)
(Alexits, Gyorgy) *See* **Proceedings: Conference on Constructive Theory of Functions (Approximation Theory)**, (**51** #8677)
(Berens, Hubert) *See* **Approximation theory**, (**48** #761)
(Besov, O. V.) *See* **Theory of functions and its applications**, (**51** #13518)
(Butzer, Paul L.) *See* **Linear operators and approximation**, (**50** #5498)
(Cheney, Elliot W.) *See* **Approximation theory**, (**48** #761)
(Dzjadik, V. K.) *See* **Theory of the approximation of functions, and its applications**, (**50** #13975)
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(Kudrjavcev, L. D.) *See* **Theory of functions and its applications**, (**51** #13518)
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(Nikol'skiĭ, S. M.) *See* **Theory of functions and its applications**, (**51** #13518)
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42A04 Trigonometric polynomials, inequalities, extremal problems

Askey, Richard A. (*with* Steinig, John) A monotonic trigonometric sum. **53** #11288
Bljumin, S. L. (*with* Kotljar, B. D.) An inequality of S. N. Bernšteĭn. (Russian. English summary) **45** #799
Bugrov, Ja. S. Conditions for the uniform boundedness of trigonometric polynomials in the L-metric. (Russian) **52** #8762
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Chidambaraswamy, J. On a conjecture of J. E. Littlewood. **51** #6260
Davenport, Harold The zeros of trigonometrical polynomials. **47** #5501
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Dhombres, Jean G. Autour de l'interpolation de Lagrange. (**50** #2732 (EA **58**))
Forst, Wilhelm Optimale Hermite-Interpolation differenzierbarer periodischer Funktionen. (English summary) (**56** #12701)
Kel′zon, A. A. Functions of bounded (m,p)-variation. (Russian. Georgian and English summaries) (**52** #8767)
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Bljumin, S. L. (*with* Kotljar, B. D.) The s-numbers of integral operators and the Fou coefficients of summable functions. (Russian) (45 #4220)

Bratti, Giuliano Un altro modo di costruire la serie di Fourier delle distribuzioni di variabile quasi periodiche. (46 #4192)

Burkill, H. A note on trigonometric series. (47 #2250)

Butzer, Paul L. (*with* Westphal, Ursula) An access to fractional differentiation fractional difference quotients. (58 #11267)

(*with* Stens, R. L.) The operational properties of the Chebyshev transform General properties. (57 #13392)

Čanturija, Z. A. The modulus of variation of a function and continuity. (Russ Georgian and English summaries) (53 #8349)

Cochran, James Alan Growth estimates for the singular values of square-integra kernels. (52 #8823)

Darevskiĭ, V. M. The solution of ordinary linear differential equations by trigonome series. (Russian) (46 #2137)

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Geĭt, V. È. The structural properties of two conjugate functions. (Russian) (45 #9

Golubov, B. I. Determination of the jump of a function of bounded p-variation from Fourier series. (Russian) (47 #8788)

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Kokilašvili, V. M. The coefficients of power series and trigonometric Fourier se (Russian. Georgian summary) (49 #10864)

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Mukhopadhyay, S. N. On the regularity of the P^n-integral and its application summable trigonometric series. (51 #10546)

Oberhettinger, Fritz ★Fourier expansions. A collection of formulas. (50 #5372)

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Woods, Jimmie D. (*with* Posten, Harry O.) The use of Fourier series in the evaluatio probability distribution functions. (58 #24663)

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Pseudofunctions and Helson sets ★Pseudofunctions and Helson sets. (**52** #8804)

42A48 Uniqueness of trigonometric expansions, uniqueness of Fourie expansions, Riemann theory, localization

Berens, Hubert On the approximation of Fourier series by Abel means. **50** #5344
Burkill, H. A note on trigonometric series. **47** #2250
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Kahane, Jean-Pierre (*with* Katznelson, Yitzhak) Sur les ensembles d'unicité $U(\varepsilon)$ d Zygmund. **48** #9243
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Kelman, Robert B. A unified theory for classical triple trigonometric series. **55** #3664

Körner, Thomas W. A pseudofunction on a Helson set. I. **53** #8772a

A pseudofunction on a Helson set. II. **53** #8772c

Névai, G. Pál A new proof of the Riemann's localization principle. **51** #1260

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Štraus, V. A. Some generalizations of Rajchman's theorem on the formal product of trigonometric series. (Russian) **49** #9524

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Kaufman, Robert P. Brownian motion and sets of multiplicity. (**52** #15707)

Larsen, Ronald Translation invariant subspaces and sets of uniqueness for $L_p(G)$. (**54** #8148)

Mantero, Anna Maria Sets of uniqueness and multiplicity for L^p. (**54** #3294)

Soardi, Paolo Maurizio *See* **De-Michele, Leonede**, (**51** #11016)

42A52 Orthogonal functions and polynomials, general theory [See also 33A65.]

Abdulgamidov, A. R. The summability of double orthogonal series. (Russian) (See RŽMat **1970** #10 B86; MR **52** #13071)

The (C,α,β)-summability of double orthogonal series. (Russian) (See RŽMat **1971** #10 B87; MR **52** #13071)

Adomian, G. A. *See* **Miao, Charles C.**, **50** #2796

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Alexits, Gyorgy Stochastische Unabhängigkeit und Orthogonalität. **45** #4044

(*with* Szép, András) On series of product functions. **49** #5682

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Allaway, Wm. R. On finding the distribution function for an orthogonal polynomial set. **50** #10672

Al-Salam, Waleed A. (*with* Ismail, Mourad El-Houssieny) Polynomials orthogonal with respect to discrete convolution. **53** #13986

Anisimova, N. T. Polynomial orthonormal bases in subspaces of finite defect. (Russian) **54** #5722

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Orthogonal expansions with positive coefficients. II. **45** #5650

Badkov, V. M. Boundedness in the mean of orthonormal polynomials. (Russian) **48** #4623

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Cagareĭšvili, V. Š. The Fourier coefficients of a continuous function with respect to the Haar system. (Russian. Georgian and English summaries) **45** #2399

Čhaidze, G. A. Universal series. (Russian. Georgian and English summaries) **57** #3731

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Chaudhuri, Krishna A note on orthogonality preserving operators. **49** #7687

See also **Chatterjea, Santi Kumar**, **53** #1144

Chihara, T. S. On the true interval of orthogonality. **45** #4045

Convergent sequences of orthogonal polynomials. **46** #7787

★An introduction to orthogonal polynomials. **58** #1979

(Christoffers, H. J.) *See* **Olevskiĭ, A. M.**, **57** #10347

Crittenden, Richard B. (*with* Swanson, Leonard G.) Uniqueness for sets of functions generated by matrices. **58** #1980

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Cvetkov, V. P. An estimate of the least upper bound of Fejér sums in a certain system of orthogonal polynomials. (Russian) (See RŽMat **1971** #11 B105; MR **50** #6712)

Cygankov, A. A. Harmonic polynomials that are orthogonal on a plane curve. (Russian) **45** #5651

Polynomials that are orthogonal on plane sets. (Russian) **48** #2650

Danese, Arthur E. Present status and current trends in the theory of orthogonal polynomials and special functions. **58** #17678

Delsarte, P. (*with* Genin, Yves V.; Kamp, Yves G.) Orthogonal polynomial matrices on the unit circle. **58** #1981

Donio, Jean Problèmes de diagnostic par construction d'espaces mesurables. (English, German, Italian and Spanish summaries) **51** #1261

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Emel'janov, V. F. An example of a complete orthonormal system of functions on the half-line. (Russian) **58** #29780

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Über involutorische Matrizen die durch dreigliedrige Rekursionsformeln erzeugt werden. **57** #17107

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Fattorini, H. O. (*with* Russell, David L.) Uniform bounds on biorthogonal functions for real exponentials with an application to the control theory of parabolic equations. **58** #23325

Feinerman, Robert P. (*with* Kelman, Robert B.) The convergence of least squares approximations for dual orthogonal series. **52** #6308a (E **52** #6308b)

(*with* Kelman, Robert B.) Corrigenda to: "The convergence of least squares approximations for dual orthogonal series" (Glasgow Math. J. **15** (1974), 82–84). **52** #6308b

(Földes, I.) *See* **Freud, Géza**, (Not reviewed)

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(*with* Szabados, József) Remark on a theorem of H. Bohr. (Hungarian. Russian and English summaries) **46** #7788

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(*with* Németh, Géza) On the L_p-norms of orthonormal Hermite functions. **50** #7936

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Friess, L. (*with* Trautner, Rolf) Zur Häufigkeit multiplikativ-orthogonaler Funktionensysteme. **50** #2793

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Gaĭmnazarov, G. The (C,α)-summability of Fourier-Haar series. (Russian. Tajiki summary) **52** #1149

Garsia, Adriano M. (*with* Greenhall, Ch. A.) Positive orthonormal systems. (See Zbl **202**, 65)

Gasper, George (*with* Trebels, Walter) Jacobi and Hankel multipliers of type $(p,q), 1<p<q<\infty$. **58** #23326

Genin, Yves V. *See* **Delsarte, P.; et al.**, **58** #1981

Geronimus, Ja. L. G. Szegő's limit relation, and properties of the corresponding orthogonal polynomials. (Russian) **49** #9526

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Some estimates of orthogonal polynomials and the problem of Steklov. (Russian) **57** #7013

Ghizzetti, Aldo (*with* Ossicini, Alessandro) Polinomi s-ortogonali e sviluppi in serie ad essi collegati. **55** #8675

Golinskiĭ, B. L. The problem of V. A. Steklov in the theory of orthogonal polynomials. (Russian) **49** #7688

Two fundamental conditions for the asymptotic representation of polynomials that are orthogonal on the unit circle. (Russian) **50** #2794

A certain limit ratio in the theory of Szegő's orthogonal polynomials. (Russian) **52** #11456

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Grinšpun, Z. S. (*with* Šuster, L. A.) Some elementary inequalities of the theory of orthogonal polynomials. (Russian) **58** #23327

Gukevič, V. O. Some peculiarities of complete systems of functions that are almost orthogonal in the sense of Bellman. (Ukrainian. Russian summary) (See RŽMat **1976** #4 B73)

On a generalization of Paley's theorem. (Ukrainian. Russian summary) **58** #29785

Hunter, D. B. Some properties of orthogonal polynomials. **51** #10988

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On uniform summability-Λ of orthonormal expansions of functions of class L^∞. **58** #29786

Igari, Satoru (*with* Uno, Yoshikazu) Banach algebra related to the Jacobi polynomials. **55** #6102

Il'jasov, Š. I. Certain questions of systems of orthogonal polynomials that relate to a two-dimensional domain. (Russian) **46** #4097

Certain properties of a system of orthogonal functions of two variables on a contour Γ. (Russian) (See RŽMat **1970** #12 B83; MR **52** #13071)

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Justice, James H. The Szegö recursion relation and inverses of positive definite Toeplitz matrices. **50** #880

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Karlin, Samuel (*with* McGregor, James) Some properties of determinants of orthogonal polynomials. **53** #3586

Kašin, B. S. On Weyl's multipliers for almost everywhere convergence of orthogonal series. (Russian summary) **55** #13148

On the mean value of certain functions connected with the convergence of orthogonal series. (Russian summary) **57** #13357

Remarks on the estimation of Lebesgue functions of orthonormal systems. (Russian) **58** #29787

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Koornwinder, Tom H. (*with* Sprinkhuizen-Kuyper, Ida) Generalized power series expansions for a class of orthogonal polynomials in two variables. **58** #12170

Krall, Allan M. Orthogonal polynomials through moment generating functionals. **58** #12171

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Kreutzkamp, Th. Orthogonale "Lückenpolynome" im endlichen und unendlichen Intervall. **53** #13988

Krivonogov, N. P. Some estimates for orthogonal polynomials in the case of algebraic zeros of a weight function. (Russian) **58** #29788

Lampone, Leo W. A positive polynomial expansion problem in minimum variance smoothing. **58** #1984

Laščenov, K. V. On the question of polynomials that are orthogonal on $[-1, +1]$ with respect to the weight $w(x)=(1-x)^{1/2}(1+x)^{-1/2}(1-\mu x^2)^{-1}$. (Russian) **46** #5920

The problem of expanding functions in polynomials orthogonal with respect to the weight function $(1-\mu x^2)^{-1}(1-x^2)^{1/2}$. (Russian) **58** #29789

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Mhitarjan, S. M. Certain complete orthogonal systems of functions and their applications to the solution of two types of dual series equations. (Russian. Armenian and English summaries) **46** #2345

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Mikolás, Miklós Über die Charakterisierung orthogonaler Systeme von Haarschem Typ. **48** #4624

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Morton, Robert D. (*with* Krall, Allan M.) Distributional weight functions for orthogonal polynomials. **58** #12172

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Pulatov, A. I. The coupling of two different orthogonal systems of trigonometric polynomials. (Russian) **58** #29793

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Rafal′son, S. Z. Fourier-Laguerre coefficients. (Russian) **45** #5652

Rahmanov, E. A. The asymptotic behavior of the ratio of orthogonal polynomials. (Russian) **56** #3556

Reimer, Manfred Orthogonale Polynome, die einer Rekursionsgleichung mit konstanten Polynomkoeffizienten genügen. **54** #8135

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Schleusner, John W. A note on biorthogonal polynomials in two variables. **48** #11888

Sedleckiĭ, A. M. A class of biorthogonal expansions in exponential functions. (Russian) **58** #1986

Seĭtalin, A. S. Bessel's inequality and Parseval's formula. (Russian) (Not reviewed)

Closed orthogonal systems. The Reisz-Fischer theorem. (Russian) (Not reviewed)

Orthogonal systems of functions. (Russian) (Not reviewed)

A Fourier series in $C_n(x)$ and a Fourier series in $S_n(x)$. (Russian) (Not reviewed)

Singh, V. B. *See* **Dwivedi, A. P., 58** #29798

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★Polynomials orthogonal over a region and Bieberbach polynomials. **57** #3732b

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Trench, William F. Orthogonal polynomial expansions with nonnegative coefficients. **54** #8136

Tuan, P. D. (*with* Elliott, David L.) Coefficients in series expansions for certain classes of functions. **46** #598

Turán, Pál On orthogonal polynomials. (Russian summary) **53** #3587

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Ullman, J. L. On the regular behaviour of orthogonal polynomials. **45** #809

Umar, Sarfaraz (*with* Wafi, Abdul; Khan, Huzoor H.) On the approximation of functions by general orthonormal polynomials on a finite segment. **58** #1988

Uno, Yoshikazu *See* **Igari, Satoru, 55** #6102

Wafi, Abdul *See* **Umar, Sarfaraz; et al., 58** #1988

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Secondary classifications:

Askey, Richard A. Positive Jacobi polynomial sums. III. (**55** #3364)

(*with* Gasper, George) Positive Jacobi polynomial sums. II. (**55** #3363)

(Bari, N. K.) *See* **Gerisch, W.,** (**45** #869)

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Beckmann, Petr ★Orthogonal polynomials for engineers and physicists. (**56** #3380)

Čanturija, Z. A. On unconditional bases of space L_p $(i<p<\infty)$. (Russian. English summary) (**46** #6009)

Orthogonal polynomial bases. (Russian) (**48** #6916)

Orthogonal polynomial bases of spaces of continuous and summable functions. (Russian. Georgian and English summaries) (**58** #2196)

Cvetkov, V. P. Approximation of functions that satisfy the Lipschitz condition by Abel-Poisson sums of their Fourier series with respect to a class of orthogonal Bernšteĭn-Szegő polynomials. (Russian) (**58** #6841)

Cygankov, A. A. Certain estimates and asymptotic formulas for superorthogonal polynomials. (Russian) (**46** #9303)

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Farooqui, A. S. A complete set of orthonormal harmonic functions. (**58** #22703)

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Gerisch, W. A remark on the works of N. K. Bari on biorthogonal systems and bases in Hilbert space. (Russian) (**45** #869)

Goffman, Casper (*with* Waterman, Daniel) A remark concerning universal series. (**47** #7409)

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Harmuth, Henning F. ★Transmission of information by orthogonal functions. (**49** #12147)

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Hirschman, I. I., Jr. Recent developments in the theory of finite Toeplitz operators. (**46** #4260)

Kailath, Thomas (*with* Vieira, A.; Morf, Martin) Inverses of Toeplitz operators, innovations, and orthogonal polynomials. (**58** #23722)

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Leindler, László On the strong approximation of orthogonal series. (**52** #6292)

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Nikišin, E. M. Systems of convergence in measure for l_2. (Russian) (**47** #5579)

Nuttall, J. (*with* Singh, Sheo Ram) Orthogonal polynomials and Padé approximants associated with a system of arcs. (**58** #6833)

Olevskiĭ, A. M. The stability of the orthogonalization operator. (Russian) (**50** #14177)

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Kubota, Tomio On a generalized Fourier transformation. (**56** #5438)
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42A84 Classical almost periodic functions, mean periodic functions [See also 43A60.]

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Satyanarayan Rao, Aribindi A note on the integration of Stepanov-almost periodic functions. **53** #8779
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  (*with* Vasilache, Sergiu) On the primitive of a certain Stepanov almost periodic function. (Italian summary) **58** #6905

Sedleckiĭ, A. M. Mean periodic extension of continuous functions with preservation of smoothness. (Russian) **48** #6807

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  A connection between H-almost periodic functions and almost periodic functions of other types. **56** #6276
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Vasilache, Sergiu *See* **Satyanarayan Rao, Aribindi**, **58** #6905

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